SERFF Tracking #: HNVR-132139449 State Tracking #:

Company Tracking #: DC-CA-19657

State: District of Columbia Filing Company: Allmerica Financial Benefit Insurance Company

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: DC- CAPE Auto Filing

Project Name/Number: Commercial Lines/CA /DC-CA-19657

Filing at a Glance

Company: Allmerica Financial Benefit Insurance Company

Product Name: DC- CAPE Auto Filing
State: District of Columbia
TOI: 20.0 Commercial Auto

Sub-TOI: 20.0000 Commercial Auto Combinations

Filing Type: Rate/Rule
Date Submitted: 11/13/2019

SERFF Tr Num: HNVR-132139449
SERFF Status: Submitted to State

State Tr Num:

State Status:

Co Tr Num: DC-CA-19657

Effective Date 03/01/2020

Requested (New):

Effective Date 03/01/2020

Requested (Renewal):

Author(s): Jenifer Kochis, Robert Hayden

Reviewer(s):

Disposition Date:
Disposition Status:
Effective Date (New):
Effective Date (Renewal):

State: District of Columbia Filing Company: Allmerica Financial Benefit Insurance Company

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: DC- CAPE Auto Filing

Project Name/Number: Commercial Lines/CA /DC-CA-19657

General Information

Project Name: Commercial Lines/CA Status of Filing in Domicile:
Project Number: DC-CA-19657 Domicile Status Comments:

Reference Organization: Reference Number:
Reference Title: Advisory Org. Circular:

Filing Status Changed: 11/13/2019

State Status Changed: Deemer Date:

Created By: Jenifer Kochis Submitted By: Robert Hayden

Corresponding Filing Tracking Number:

Filing Description:

This filing is to revise our Allmercia Financial Benefit Insurance Company Commercial Automobile line of business effective March 1, 2020 for new and renewal business. The overall estimated rate impact is 5.1%.

The following revisions are proposed:

- 1. Loss Costs
- 2. Hired Auto Minimum Premium
- 3. Non-Ownership Liability
- 4. Business Auto Coverage Broadening Endorsement Class Code Correction

Company and Contact

Filing Contact Information

Robert Hayden, Associate Compliance rhayden@hanover.com

Analyst

440 Lincoln Street 508-855-3138 [Phone] 3138 [Ext]

Worcester, MA 01653 508-855-4786 [FAX]

Filing Company Information

Allmerica Financial Benefit CoCode: 41840 State of Domicile: Michigan Insurance Company Group Code: 88 Company Type: Property &

440 Lincoln Street Group Name: The Hanover Ins Casualty

Worcester, MA 01653 Group State ID Number:

(508) 855-1000 ext. [Phone] FEIN Number: 23-2643430

Filing Fees

Fee Required? No Retaliatory? No

Fee Explanation:

State: District of Columbia Filing Company: Allmerica Financial Benefit Insurance Company

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: DC- CAPE Auto Filing

Project Name/Number: Commercial Lines/CA /DC-CA-19657

Rate Information

Rate data applies to filing.

Filing Method: File and Use

Rate Change Type: Increase

Overall Percentage of Last Rate Revision: 6.300%

Effective Date of Last Rate Revision: 02/01/2019

Filing Method of Last Filing: File and Use

SERFF Tracking Number of Last Filing: HNVR-131666361

Company Rate Information

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	Number of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
Allmerica Financial Benefit Insurance Company	9.900%	5.100%	\$19,066	79	\$373,852	50.100%	0.000%

State: District of Columbia Filing Company: Allmerica Financial Benefit Insurance Company

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: DC- CAPE Auto Filing

Project Name/Number: Commercial Lines/CA /DC-CA-19657

Rate/Rule Schedule

Item	Schedule Item				Previous State	
No.	Status	Exhibit Name	Rule # or Page #	Rate Action	Filing Number	Attachments
1		DISTRICT OF COLUMBIA Commercial Automobile State Exception Pages Allmerica Financial Benefit Insurance Company (AFB)	1-20	Replacement	HNVR-131666361	DC Exception Pages CAPE 20200301.pdf
2		Commercial Lines Manual Division One Automobile Loss Cost Pages Allmerica Financial Benefit Insurance Company	1-3	Replacement	HNVR-131666361	Appendix A - DC Proprietary Loss Cost Pages for Filing - CAPE.pdf

DISTRICT OF COLUMBIA

Commercial Automobile State Exception Pages Allmerica Financial Benefit Insurance Company (AFB) Effective Date, New Business and Renewals: March 1, 2020

		ISO Filing		Hanover Effective
	ISO Circular	Designation	ISO Effective Date	Date
Loss Costs*	LI-CA-2011-174	CA-2011-BRLA1	10/1/2011	5/1/2012
Rules	LI-CA-2005-362	CA-2005-ORU01	4/1/2006	4/1/2011
Class Plan	LI-CA-2011-173	CA-2011-RCP1	10/1/2011	5/1/2012
Increased Limits Factors	LI-CA-2018-150	CA-2018-IALL1	10/1/2018	2/1/2019
UM Loss Costs*	LI-CA-2011-174	CA-2011-BRLA1	10/1/2011	5/1/2012
Composite Rating Plan	LI-CA-2017-095	RP-2016-RCP16	8/1/2017	2/1/2018
Retrospective Rating Plan	LI-CA-2017-096	RP-2016-RRP16	8/1/2017	2/1/2018
Experience & Schedule	LI-CA-2012-275	RP-2012-RAL12	4/1/2013	12/1/2015
Rating Plans	LI-CA-2012-276	RP-2012-RPD12	4/1/2013	12/1/2015

^{*}Please see Appendix A for Proprietary Loss Costs for PPTs, TTTs, Publics, and Hired Autos.

Loss Cost Multipliers *

Liability and No-Fault 1.907 Physical Damage 1.934 UM / UIM 1.907

Business Auto Coverage Broadening Endorsement (461-0155, 09/97)

- > This endorsement amends coverage provided under the Commercial Auto Coverage Form CA0001.
- > This endorsement is available for any policy which includes CA0001. Class Code 9990 applies.

 1 - 4 Motorized Units
 \$125

 5 - 10 Motorized Units
 \$250

 11+ Motorized Units
 \$400

COMPANY EXCEPTIONS TO ISO STATE INSURANCE MANUAL

8. POLICY-WRITING MINIMUM PREMIUM

The policy-writing minimum premium is \$500.

22. PREMIUM DEVELOPMENT - OTHER THAN ZONE RATED AUTOS

Paragraphs 22.A and 22.B are replaced by the following:

A. Eligibility

This rule applies to:

- 1. All light trucks and trailers used with light trucks.
- 2. All other trucks, tractors and trailers which regularly operate within a 300 mile radius from the street address of principal garaging. For those autos regularly operating beyond a 300 mile radius, refer to Rule 25.
- B. Determination Of Classification Rating Factor And Class Code

Determine the classification rating factor and class code as follows:

- 1. Determine whether the risk is classified as fleet or non-fleet according to Rule 23.
- 2. Determine the primary rating factor according to Rule 23. based on size class, business use class and radius class.
- 3. Determine the secondary rating factor, if any, according to Rule 23. based on the special industry classifications.
- 4. Determine the combined rating factor by adding the secondary rating factor to or subtracting it from the primary rating factor.
- 5. For trailers used with light trucks which regularly operate beyond a 300 mile radius, use the primary rating factor for the intermediate rating class.

^{*} Final rates are to be determined by multiplying the proprietary loss cost by the multipliers shown above.

> This endorsement is not subject to any further premium discounts or modifications.

23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS

Paragraphs 23.B.3, 23.B.4 and 23.B.5 are replaced by the following:

- 3. Business Use Class If a truck, tractor or trailer has more than one use, use the highest rated classification unless 80% of the use is in a lower rated activity. In that case, use the lower rated classification.
 - a. Service Use Autos used for transporting the insured's personnel, tools, equipment and incidental supplies to or from a job location. This classification is confined to autos principally parked at 2 or fewer job locations for the majority of the working day or used to transport supervisory personnel between job locations.
 - b. Extended Service Use Autos used for transporting the insured's personnel, tools, equipment and incidental supplies to or from a job location. This classification is confined to autos principally parked at 3 to 5 job locations for the majority of the working day or used to transport supervisory personnel between job locations.
 - c. Retail Use Autos used to pick up property from, or deliver property to individual households.
 - d. Commercial Use Autos used for transporting property other than those autos defined as service, extended service or retail.
- 4. Radius Class Determine radius on a straight line from the street address of principal garaging.
 - a. Local (Up To 50 Miles) The auto is not regularly operated beyond a radius of 50 miles from the street address where such auto is principally garaged.
 - b. Limited Intermediate (51 To 100 Miles) The auto is operated beyond a radius of 50 miles but not regularly beyond a radius of 100 miles from the street address where such auto is principally garaged.
 - c. Intermediate (101 To 200 Miles) The auto is operated beyond a radius of 100 miles but not regularly beyond a radius of 200 miles from the street address where such auto is principally garaged.
 - d. Extended Intermediate (201 To 300 Milles) The auto is operated beyond a radius of 200 miles but not regularly beyond a radius of 300 miles from the street address where such auto is principally garaged.
 - e. Limited Long Distance (301 To 600 Miles) The auto is operated regularly beyond a radius of 300 miles but not regularly beyond a radius of 600 miles from the street address where such auto is principally garaged. Apply zone rates for other than light trucks and trailers used with light trucks.
 - f. Long Distance (601 To 1,200 Miles) The auto is operated regularly beyond a radius of 600 miles but not regularly beyond a radius of 1200 miles from the street address where such auto is principally garaged. Apply zone rates for other than light trucks and trailers used with light trucks.
 - g. Extended Long Distance (over 1,200 Miles) The auto is operated regularly beyond 1,200 mile radius from the street address where such auto is principally garaged. Apply zone rates for other than light trucks and trailers used with light trucks.

a. Local Radius

				Radiu	Radius Class		
	Business Use			Local (up to 50 miles)			
Size Class	Class	Codes		Liability Factor	Phys Dam Factor		
	Service	Non-Fleet	111	1.00	1.00		
	Jei vice	Fleet	121	1.00	1.00		
	Extended Service	Non-Fleet	131	1.05	1.00		
Light Trucks	Exterided del vide	Fleet	141	1100	1100		
(0 - 10,000 lbs G.V.W.)	Retail	Non-Fleet	151	1.50	1.05		
	Ketali	Fleet	161	1.50	1.00		
	Commercial	Non-Fleet	171	1.35	1.10		
	o o i i i i i i i i i i i i i i i i i i	Fleet	181	1100			
	Service	Non-Fleet	211	1.05	0.75		
		Fleet	221				
Medium Trucks	Extended Service	Non-Fleet	231	1.10	0.75		
10,001 - 20,000 lbs		Fleet	241				
G.V.W.)	Retail	Non-Fleet	251	1.55	0.80		
	rectan	Fleet	261	1100	0.00		
	Commercial	Non-Fleet	271	1.40	0.85		
	Commercial	Fleet	281	1.40	0.60		
	Service	Non-Fleet	311	1.10	0.70		
	0011100	Fleet	321				
In as a s Terral to	Extended Service	Non-Fleet	331	1.15	0.70		
Heavy Trucks (20,001 - 45,000 lbs	Extended Sci vice	Fleet	341	1.10	0.70		
G.V.W.)	Retail	Non-Fleet	351	1.65	0.75		
		Fleet	361	1.00			
	Commercial	Non-Fleet	371	1.50	0.80		
		Fleet	381		0.00		
Extra-Heavy Trucks	(over	Non-Fleet	491	2.10	1.00		
15,000 lbs G.V.W.)		Fleet	401	2.10	1.00		
	Service	Non-Fleet	511	1.35	0.75		
	Jei vice	Fleet	521	1.55	0.70		
	Extended Service	Non-Fleet	531	1.40	0.75		
Heavy Truck-Tractors	Exterided del vide	Fleet	541		0.70		
(0 - 45,000 lbs G.C.W.)	Retail	Non-Fleet	551	2.00	0.80		
		Fleet	561				
	Commercial	Non-Fleet	571	1.85	0.85		
		Fleet	581		5.55		
Extra-Heavy Truck-Tractors		Non-Fleet	691	2.35	1.05		
(over 45,000 lbs G.C.W.)		Fleet	601	2.00			
		Trailer T			1		
Semitrailers		Non-Fleet	7N1	0.10	0.65		
		Fleet	7F1	2.10	0.00		
Frailers		Non-Fleet	8N1	0.10	0.50		
		Fleet	8F1	0.10	5.55		
Service or Utility Trailer	(0	Non-Fleet	9N1	0.00	0.40		
2,000 lbs Load Capacity)		Fleet	9F1	0.00	0.40		

Table 23.B.5.a Local Radius

b. Limited Intermediate

				Radius Class		
	Business Use			Limited Intermediate (51 to 100 miles)		
Size Class	Class	Codes		Liability Factor	Phys Dam Factor	
	Service	Non-Fleet	112	1.15	1.13	
	Sel vice	Fleet	122	1.15	1.13	
	Extended Service	Non-Fleet	132	1.20	1.13	
Light Trucks	Extended Service	Fleet	142	1.20	1.10	
(0 - 10,000 lbs G.V.W.)	Retail	Non-Fleet	152	1.75	1.18	
	Ketali	Fleet	162	1.75	1.10	
	Commercial	Non-Fleet	172	1.60	1.28	
	o o minor o i a i	Fleet	182	1.00	1120	
	Service	Non-Fleet	212	1.20	0.88	
	001 1100	Fleet	222	1120	0.00	
Medium Trucks	Extended Service	Non-Fleet	232	1.25	0.88	
(10,001 - 20,000 lbs		Fleet	242			
G.V.W.)	Retail	Non-Fleet	252	1.80	0.93	
		Fleet	262			
	Commercial	Non-Fleet	272	1.65	0.98	
		Fleet	282			
	Service	Non-Fleet	312	1.40	0.80	
	0011100	Fleet	322			
Heavy Trucks	Extended Service	Non-Fleet	332	1.45	0.80	
(20,001 - 45,000 lbs	Extended Service	Fleet	342	1.40	0.00	
G.V.W.)	Retail	Non-Fleet	352	2.05	0.85	
,	Retail	Fleet	362			
	Commercial	Non-Fleet	372	1.90	0.95	
	Commercial	Fleet	382	1.70		
Extra-Heavy Trucks	(over	Non-Fleet	492	2.70	1.20	
45,000 lbs G.V.W.)		Fleet	402	2.70	1.20	
	Service	Non-Fleet	512	1.65	0.85	
	Scrvice	Fleet	522	1.05	0.03	
	Extended Service	Non-Fleet	532	1.70	0.85	
Heavy Truck-Tractors	Exterided Service	Fleet	542	1.70	0.03	
(0 - 45,000 lbs G.C.W.)	Retail	Non-Fleet	552	2.45	0.90	
	Retail	Fleet	562	2.43	0.70	
	Commercial	Non-Fleet	572	2.30	0.95	
	Commercial	Fleet	582	2.30	0.75	
Extra-Heavy Truck-Tractors (over 45,000 lbs G.C.W.)		Non-Fleet	692	3.00	1.20	
		Fleet	602	3.00	1.20	
		Trailer T	ypes			
Semitrailers		Non-Fleet	7N2	0.15	0.75	
		Fleet	7F2	0.15	0.75	
Trailore		Non-Fleet	8N2	0.15	0.40	
Trailers		Fleet	8F2	0.15	0.60	
Service or Utility Trailer	(0	Non-Fleet	9N2	0.00	0.50	
2,000 lbs Load Capacity)	,	Fleet	9F2	0.00	0.50	

Table 23.B.5.b Limited Intermediate Radius

c. Intermediate

				Radiu	Radius Class		
	Business Use			Intermediate (101 to 200 miles)			
Size Class	Class	Codes		Liability Factor	Phys Dam Factor		
	Service	Non-Fleet	113	1.20	1.15		
	Sci vice	Fleet	123	1.20	1.15		
	Extended Service	Non-Fleet	133	1.25	1.15		
Light Trucks	Exteriaca corvico	Fleet	143	1.20			
(0 - 10,000 lbs G.V.W.)	Retail	Non-Fleet	153	1.80	1.20		
		Fleet	163				
	Commercial	Non-Fleet	173	1.65	1.30		
		Fleet	183				
	Service	Non-Fleet	213	1.25	0.90		
		Fleet	223				
Medium Trucks	Extended Service	Non-Fleet	233	1.30	0.90		
(10,001 - 20,000 lbs		Fleet	243				
G.V.W.)	Retail	Non-Fleet	253	1.85	0.95		
		Fleet	263		<u> </u>		
	Commercial	Non-Fleet	273	1.70	1.00		
		Fleet	283				
	Service	Non-Fleet	313	1.40	0.80		
		Fleet	323				
Heavy Trucks	Extended Service	Non-Fleet	333	1.45	0.80		
(20,001 - 45,000 lbs		Fleet Non-Fleet	343 353		<u> </u>		
G.V.W.)	Retail			2.05	0.85		
		Fleet Non-Fleet	363 373				
	Commercial	Fleet		1.90	0.95		
Evitas Illasiai Taijaka	(0)100		383 493				
Extra-Heavy Trucks 45,000 lbs G.V.W.)	(over	Fleet	493	2.70	1.20		
40,000 103 (0.1.11)		Non-Fleet	513		_		
	Service	Fleet	523	1.65	0.85		
		Non-Fleet	533				
Heavy Truck-Tractors	Extended Service	Fleet	543	1.70	0.85		
(0 - 45,000 lbs G.C.W.)		Non-Fleet	553		1		
	Retail	Fleet	563	2.45	0.90		
		Non-Fleet	573				
	Commercial	Fleet	583	2.30	0.95		
Extra-Heavy Truck-Tracto	rs	Non-Fleet	693	_	1		
(over 45,000 lbs G.C.W.)		Fleet	603	3.00	1.20		
		Trailer T			.1		
2 14 11		Non-Fleet	7N3	0.15	0.75		
Semitrailers		Fleet	7F3	0.15	0.75		
T 11		Non-Fleet	8N3	0.15	0.10		
Trailers		Fleet	8F3	0.15	0.60		
Service or Utility Trailer	(0		9N3	0.00	0.50		
2,000 lbs Load Capacity)	,	Fleet	9F3	0.00	0.50		

Table 23.B.5.c Intermediate Radius

d. Extended Intermediate

				Radiu	Radius Class		
	Business Use			Extended Intermediate (201 to 300 miles)			
Size Class	Class	Codes		Liability Factor	Phys Dam Factor		
	Service	Non-Fleet	114	1.25	1.17		
	Sel vice	Fleet	124	1.25	1.17		
	Extended Service	Non-Fleet	134	1.30	1.17		
Light Trucks	Extended Service	Fleet	144	1.50	1.17		
(0 - 10,000 lbs G.V.W.)	Retail	Non-Fleet	154	1.85	1.22		
		Fleet	164				
	Commercial	Non-Fleet	174	1.70	1.32		
		Fleet	184				
	Service	Non-Fleet	214	1.30	0.92		
		Fleet	224		****		
Medium Trucks	Extended Service	Non-Fleet	234	1.35	0.92		
(10,001 - 20,000 lbs		Fleet	244				
G.V.W.)	Retail	Non-Fleet	254	1.90	0.97		
		Fleet	264				
	Commercial	Non-Fleet	274	1.75	1.02		
		Fleet	284				
	Service	Non-Fleet	314	1.40	0.80		
		Fleet	324				
Heavy Trucks	Extended Service	Non-Fleet	334	1.45	0.80		
(20,001 - 45,000 lbs		Fleet	344				
G.V.W.)	Retail	Non-Fleet	354	2.05	0.85		
•	retail	Fleet	364		0.00		
	Commercial	Non-Fleet	374	1.90	0.95		
	Commorcial	Fleet	384	,0	0.70		
Extra-Heavy Trucks	(over	Non-Fleet	494	2.70	1.20		
45,000 lbs G.V.W.)		Fleet	404	2.70	20		
	Service	Non-Fleet	514	1.65	0.85		
	0011100	Fleet	524	1.00	0.00		
	Extended Service	Non-Fleet	534	1.70	0.85		
Heavy Truck-Tractors	Externada del vido	Fleet	544	11.70	0.00		
(0 - 45,000 lbs G.C.W.)	Retail	Non-Fleet	554	2.45	0.90		
	rectan	Fleet	564	2.10	0.70		
	Commercial	Non-Fleet	574	2.30	0.95		
	Commorcial	Fleet	584	2.00	0.70		
Extra-Heavy Truck-Tractors		Non-Fleet	694	3.00	1.20		
(over 45,000 lbs G.C.W.)	Fleet	604	0.00	1.20			
		Trailer T	ypes				
Semitrailers		Non-Fleet	7N4	0.15	0.75		
		Fleet	7F4	0.15	0.75		
Trailers		Non-Fleet	8N4	0.15	0.60		
Trailers		Fleet	8F4	0.15	0.60		
Service or Utility Trailer	(0	Non-Fleet	9N4	0.00	0.50		
2,000 lbs Load Capacity)		Fleet	9F4	0.00	0.50		

Table 23.B.5.d Extended Intermediate Radius

e. Limited Long Distance

				Radius Class Limited Long Distance (301 to 600 miles)		
	Business Use					
Size Class	Class	Codes		Liability Factor	Phys Dam Factor	
	Service	Non-Fleet	115	1.30	1.20	
		Fleet	125			
	Extended Service	Non-Fleet	135	1.35	1.20	
light Trucks		Fleet	145			
(0 - 10,000 lbs G.V.W.)	Retail	Non-Fleet	155	1.80	1.25	
		Fleet	165			
	Commercial	Non-Fleet	175	1.75	1.35	
		Fleet	185	70NF	DATED	
		Non-Fleet	215	ZONE	RATED	
	Service	Fleet	225	0.90	1.00	
		Non-Fleet	235			
Medium Trucks	Extended Service	Fleet	245	0.90	1.00	
(10,001 - 20,000 lbs		Non-Fleet	255			
G.V.W.)	Retail	Fleet	265	0.90	1.00	
		Non-Fleet	275		 	
	Commercial	Fleet	285	0.90	1.00	
		Non-Fleet	315	1.00	1.00	
	Service	Fleet	325	1.00		
	Extended Service	Non-Fleet	335	1.00	1.00	
Heavy Trucks (20,001 - 45,000 lbs	Exterided Service	Fleet	345	1.00	1.00	
3.V.W.)	Retail	Non-Fleet	355	1.00	1.00	
,	Retail	Fleet	365	1.00	1.00	
	Commercial	Non-Fleet	375	1.00	1.00	
	Commercial	Fleet	385	1.00	1.00	
Extra-Heavy Trucks		Non-Fleet	495	1.45	1.15	
over 45,000 lbs G.V.W.)		Fleet	405	1.40	1.15	
	Service	Non-Fleet	515	1.00	1.00	
		Fleet	525	1.00		
	Extended Service	Non-Fleet	535	1.00	1.00	
Heavy Truck-Tractors		Fleet	545			
(0 - 45,000 lbs G.C.W.)	Retail	Non-Fleet	555	1.00	1.00	
		Fleet	565			
	Commercial	Non-Fleet	575	1.00	1.00	
Tytro Hoovay Truck Tracts	are.	Fleet Non-Fleet	585 695			
Extra-Heavy Truck-Tracto (over 45,000 lbs G.C.W.)		Fleet	605	1.45	1.15	
10,000 100 0.0.0.		Trailer T			1	
		Non-Fleet	7N5			
Semitrailers		Fleet	7F5	0.15	0.65	
		Non-Fleet	8N5			
Trailers		Fleet	8F5	0.15	0.65	
Service or Utility Trailer	(0		9N5		1	
2,000 lbs Load Capacity)	(Fleet	9F5	0.00	0.65	

Table 23.B.5.e Limited Long Distance Radius

f. Long Distance

				Radius Class		
	Business Use			Long Distance (601 to 1200 miles)		
Size Class	Class	Codes		Liability Factor	Phys Dam Factor	
	Service	Non-Fleet	116	1.40	1.25	
	0011100	Fleet	126		1120	
	Extended Service	Non-Fleet	136	1.45	1.25	
ight Trucks		Fleet	146		-	
(0 - 10,000 lbs G.V.W.)	Retail	Non-Fleet	156	1.90	1.30	
		Fleet	166			
	Commercial	Non-Fleet	176	1.85	1.40	
		Fleet	186	70NF	DATED	
		Non-Fleet	216	ZUNE	RATED	
	Service	Fleet	226	1.00	1.05	
		Non-Fleet	236			
Medium Trucks	Extended Service	Fleet	246	1.00	1.05	
(10,001 - 20,000 lbs		Non-Fleet	256			
G.V.W.)	Retail	Fleet	266	1.00	1.05	
		Non-Fleet	276			
	Commercial	Fleet	286	1.00	1.05	
		Non-Fleet	316	4.40	4.05	
	Service	Fleet	326	1.10	1.05	
	Extended Service	Non-Fleet	336	1.10	1.05	
Heavy Trucks (20,001 - 45,000 lbs	Extended Service	Fleet	346	1.10	1.05	
(20,001 - 45,000 lbs G.V.W.)	Retail	Non-Fleet	356	1.10	1.05	
,	Retail	Fleet	366	1.10		
	Commercial	Non-Fleet	376	1.10	1.05	
	Commercial	Fleet	386	1.10	1.05	
Extra-Heavy Trucks		Non-Fleet	496	1.55	1.20	
over 45,000 lbs G.V.W.)		Fleet	406	1.00	1.20	
	Service	Non-Fleet	516	1.10	1.05	
		Fleet	526			
	Extended Service	Non-Fleet	536	1.10	1.05	
Heavy Truck-Tractors		Fleet	546			
(0 - 45,000 lbs G.C.W.)	Retail	Non-Fleet	556	1.10	1.05	
		Fleet	566			
	Commercial	Non-Fleet	576	1.10	1.05	
Codes III and Tours Tours		Fleet	586			
Extra-Heavy Truck-Tracto over 45,000 lbs G.C.W.)) i S	Non-Fleet Fleet	696 606	1.55	1.20	
(5.5. 40,000 lb3 0.0.W.)		Trailer T			1	
		Non-Fleet	7N6			
Semitrailers		Fleet	7F6	0.15	0.65	
		Non-Fleet	8N6			
Trailers		Fleet	8F6	0.15	0.65	
Service or Utility Trailer (0			9N6			
service or Utility Trailer				0.00	0.65	

Table 23.B.5.f Long Distance Radius

g. Extended Long Distance

				Radius Class		
	Business Use			Extended Long Distance (over 1200 miles)		
Size Class	Class	Codes		Liability Factor	Phys Dam Factor	
	Service	Non-Fleet	117	1.50	1.30	
		Fleet	127	1.00	1.00	
	Extended Service	Non-Fleet	137	1.55	1.30	
Light Trucks		Fleet	147			
(0 - 10,000 lbs G.V.W.)	Retail	Non-Fleet	157	2.00	1.35	
		Fleet	167			
	Commercial	Non-Fleet	177	1.95	1.45	
		Fleet	187	7015	DATER	
		Non Flora	047	ZONE	RATED	
	Service	Non-Fleet	217	1.10	1.10	
		Fleet Non-Fleet	227			
Medium Trucks	Extended Service	Fleet	247	1.10	1.10	
(10,001 - 20,000 lbs		Non-Fleet	257			
G.V.W.)	Retail	Fleet	267	1.10	1.10	
		Non-Fleet	277			
	Commercial	Fleet	287	1.10	1.10	
		Non-Fleet	317			
	Service	Fleet	327	1.20	1.10	
		Non-Fleet	337			
Heavy Trucks	Extended Service	Fleet	347	1.20	1.10	
(20,001 - 45,000 lbs G.V.W.)	D-4-II	Non-Fleet	357	1.20	1.10	
3	Retail	Fleet	367	1.20	1.10	
	Commercial	Non-Fleet	377	1.20	1.10	
	Commercial	Fleet	387	1.20	1.10	
Extra-Heavy Trucks		Non-Fleet	497	1.65	1.25	
(over 45,000 lbs G.V.W.)		Fleet	407	1.05	1.25	
	Service	Non-Fleet	517	1.20	1.10	
	Set vice	Fleet	527	1.20	1.10	
	Extended Service	Non-Fleet	537	1.20	1.10	
Heavy Truck-Tractors	Exteriada del Vide	Fleet	547	1.20		
(0 - 45,000 lbs G.C.W.)	Retail	Non-Fleet	557	1.20	1.10	
		Fleet	567			
	Commercial	Non-Fleet	577	1.20	1.10	
		Fleet	587			
Extra-Heavy Truck-Tracto	ors	Non-Fleet	697	1.65	1.25	
(over 45,000 lbs G.C.W.)		Fleet	607			
		Trailer T	<i>3</i> i		1	
Semitrailers		Non-Fleet	7N7	0.15	0.65	
		Fleet	7F7		1	
Trailers		Non-Fleet	8N7	0.15	0.65	
2		Fleet	8F7			
Service or Utility Trailer	(Non-Fleet Fleet 	9N7 9F7	0.00	0.65	
2,000 ibs Luau Capacity)	2,000 lbs Load Capacity)					

Table 23.B.5.f Long Distance Radius

- C. Secondary Classification Special Industry Class
 - 1. Application According to classification, combine the secondary factor in this section with the primary factor. Insert the code provided, in the 4th and 5th digit of the classification code.
 - 2. Autos Having More Than One Use Where more than one secondary rating factor applies, use the highest rated classification unless 80% of the use is in a lower rated activity. In that case, use the lower rated classification.
 - 3. Trailer Types And Zone-Rated Autos
 - a. Codes Use the classifications and codes provided in the tables of this section.
 - b. Factors All secondary factors for Trailer Types and Zone-Rated Autos are zero (0.00). Do not use the factors provided in this section.
 - 4. Truckers Autos used to haul or transport goods, materials or commodities for another.

Truckers								
Secondary Factor for Autos (Except Trailer Types and Zone-Rated Autos)								
Classification	Liability	Phys Dam	Code					
a. Common Carriers	0.65	0.65	21					
b. Contract Carriers (Other than Chemical or Iron and Steel Haulers)	0.65	0.65	22					
c. Contract Carriers Hauling Chemicals	0.65	0.65	23					
d. Contract Carriers Hauling Iron and Steel	0.65	0.65	24					
e. Exempt Carriers (Other Than Livestock Haulers)	0.65	0.65	25					
f. Exempt Carriers Hauling Livestock	0.65	0.65	26					
g. Carriers Engaged in Both Private Carriage and Transporting Goods, Materials or Commodities for Others	0.65	0.65	02					
h. Tow Trucks for Hire (24 hour service)	0.75	0.75	03					
i. Tow Trucks for Hire (other than 24 hour service)	0.65	0.65	04					
j. Household Good Movers (franchised)	-0.10	-0.10	27					
k. Household Good Movers (non-franchised)	0.00	0.00	28					
I. Mobile Home Toters	0.65	0.65	20					
m. All Other	0.65	0.65	29					

Table 23.C.4 Truckers

5. Food Delivery - Autos used by food manufacturers to transport raw and finished products or used in wholesale distribution of food.

Food Deliver	у							
Secondary Factor for Autos (Except Trailer Types and Zone-Rated Autos)								
Classification	Liability	Phys Dam	Code					
a. Canneries and Packing Plants	0.40	0.40	31					
b. Fish and Seafood	0.40	0.40	32					
c. Frozen Food	0.40	0.40	33					
d. Fruit and Vegetable	0.40	0.40	34					
e. Meat or Poultry	0.40	0.40	35					
f. Pizza/Prepared Food	0.40	0.40	30					
g. Snack/Bakery Delivery	0.40	0.40	06					
h. Beverage Delivery (franchised)	0.30	0.30	07					
i. Beverage Delivery (non-franchised)	0.40	0.40	08					
j. Vending Machines	0.40	0.40	36					
k. Catering	0.40	0.40	37					
I. Dairy Products	0.40	0.40	38					
m. All Other	0.40	0.40	39					

Table 23.C.5 Food Delivery

6. Specialized Delivery - Autos used in deliveries subject to time and similar constraints.

Specialized Delivery	1		
Secondary Factor for Autos (Except Trailer Ty	oes and Zone-Ra	ited Autos)	
Classification	Liability	Phys Dam	Code
a. Armored Cars	0.65	0.65	41
b. Film Delivery	0.65	0.65	42
c. Magazines or Newspapers	0.65	0.65	43
d. Mail and Parcel Post - Bulk Mail Delivery	0.65	0.65	44
e. Mail and Parcel Post - Other Than Bulk Mail Delivery	0.65	0.65	45
f. Tools/Parts	0.00	0.00	46
g. Couriers	0.65	0.65	47
h. Building Materials Dealers	0.00	0.00	48
i. All Other	0.65	0.65	49

Table 23.C.6 Specialized Delivery

7. Waste Disposal - Autos transporting salvage and waste material for disposal or resale.

Waste Disposal						
Secondary Factor for Autos (Except Trailer Types and Zone-Rated Autos)						
Classification Liability Phys Dam Code						
a. Auto Dismantlers	0.25	0.25	51			
b. Building Wrecking Operators	0.25	0.25	52			
c. Garbage	0.25	0.25	53			
d. Junk Dealers	0.25	0.25	54			
e. All Other	0.25	0.25	59			

Table 23.C.7 Waste Disposal

8. Farmers

a. Autos owned by a farmer, used in connection with the operation of his own farm and occasionally used to haul commodities for other farmers.

Farmers						
Secondary Factor for Autos (Except Trailer Types	and Zone-Ra	ited Autos)				
Classification	Liability	Phys Dam	Code			
a. Individually Owned or Family Corp. (Other Than Livestock Hauling)	-0.50	-0.50	61			
b. Livestock Hauling	-0.50	-0.50	62			
c. All Other	-0.50	-0.50	69			

Table 23.C.8 Farmers

9. Dump and Transit Mix (use these factors and codes only when no other secondary classification applies)

Dump and Transit Mix							
Secondary Factor for Autos (Except Trailer Types	and Zone-Ra	ited Autos)					
Classification Liability Phys Dam Code							
a. Excavating	-0.20	-0.20	71				
b. Sand and Gravel (Other than Quarrying) - For Hire	0.00	0.00	72				
c. Sand and Gravel (Other than Quarrying) - Not For Hire	-0.20	-0.20	76				
d. Mining	-0.20	-0.20	73				
e. Quarrying	-0.20	-0.20	74				
f. Concrete	0.00	0.00	75				
g. Cement Mixers/Pumpers	0.00	0.00	77				
h. All Other	-0.20	-0.20	79				

Table 23.C.9 Dump and Transit Mix

10. Contractors (Other than Dump Trucks)

Contractors			
Secondary Factor for Autos (Except Trailer Types	and Zone-Ra	ated Autos)	
Classification	Liability	Phys Dam	Code
a. Building Commercial	-0.05	-0.05	81
b. Building Private Dwellings	-0.05	-0.05	82
c. Electrical, Plumbing, Masonry, Plastering, and other Repair or Service (franchised)	-0.05	-0.05	83
d. Electrical, Plumbing, Masonry, Plastering, and other Repair or Service (non-franchised)	-0.05	-0.05	86
e. Excavating	-0.05	-0.05	84
f. Street and Road (other than Municipal)	-0.05	-0.05	85
g. Street Cleaning (other than Municipal)	0.00	0.00	80
h. Landscaping with Plowing or Sanding	-0.05	-0.05	87
i. Landscaping without Plowing or Sanding	-0.05	-0.05	88
j. All Other	-0.05	-0.05	89

Table 23.C.10 Contractors

11. Not Otherwise Specified

Not Otherwise Specified					
Secondary Factor for Autos (Except Trailer Types	and Zone-Ra	ited Autos)			
Classification	Liability	Phys Dam	Code		
a. Logging and Lumbering	0.00	0.00	91		
b. Carpet Cleaners	0.00	0.00	92		
c. Locksmiths	0.00	0.00	93		
d. Miscellaneous Repair, excluding Contractors	0.00	0.00	94		
e. Vending Machines (non-food contents)	0.00	0.00	95		
f. Self-Propelled Food Carts	0.00	0.00	96		
g. Sandwich Trucks	0.00	0.00	97		
h. Janitorial Services (franchised only)	0.00	0.00	98		
g. All Other	0.00	0.00	99		

Table 23.C.11 Not Otherwise Specified

12. Municipal Operations

Municipal Operations					
Secondary Factor for Autos (Except Trailer Types and Zone-Rated Autos)					
Classification	Liability	Phys Dam	Code		
a. Street Cleaning (State)	0.00	0.00	10		
b. Street Cleaning - City or Town Population less than 100,000	0.00	0.00	11		
c. Street Cleaning - City or Town Population 100,000 or more	0.00	0.00	12		
d. Waste Disposal (State)	0.00	0.00	13		
e. Waste Disposal - City or Town Population less than 100,000	0.00	0.00	14		
f. Waste Disposal - City or Town Population 100,000 or more	0.00	0.00	15		
g. Street/Road Maintenance (State)	0.00	0.00	16		
h. Street/Road Maintenance - City or Town Population less than 100,000	0.00	0.00	17		
i. Street/Road Maintenance - City or Town Population 100,000 or more	0.00	0.00	18		
j. All Other	0.00	0.00	19		

Table 23.C.12 Municipal Operations

24. TRUCKERS / MOTOR CARRIERS

Rule 24.A.3 is deleted

25. PREMIUM DEVELOPMENT - ZONE RATED AUTOS

Paragraph 25.A is replaced by the following:

A. Eligibility

Except for light trucks or trailers used with light trucks, this rule applies to trucks, tractors and trailers regularly operated beyond a 300 mile radius from the street address of principal garaging.

31. PRIVATE PASSENGER TYPES - ELIGIBILITY

Rule 31 is replaced by the following:

- A. Definition A private passenger auto is a four-wheel auto of the private passenger or station wagon type. A pickup, panel truck or van not used for business is rated as a private passenger auto.
- B. Application This subsection applies to all private passenger autos which are insured on a Business Auto, Motor Carrier, or Truckers Coverage Form.
- C. Class Code and Use Factors -
 - 1. Determine PPT usage using the following criteria:
 - a. Personal/Family Use Only private passenger vehicles with no business use
 - b. Parked at work all day private passenger vehicles with personal and business use and are parked at work the majority of the working day
 - c. High Intensity Use private passenger vehicles with personal and business use and are on the road for business purposes 20,000 miles or more per year
 - d. All Other private passenger vehicles not otherwise classified
 - 2. Use Table 31.C.1 to determine PPT Class Code and Use Factor

	Fleet		Non Fleet	
Use	Code	Factor	Code	Factor
Personal/Family Use Only	7371	1.00	7372	1.00
Personal and Business Use				
Parked at work all day	7373	0.95	7374	0.95
High Intensity Use	7375	1.10	7376	1.10
All Other	7377	1.00	7378	1.00

Table 31.C.1 PPT Use Factors

Multiply the private passenger types rates developed from the state company rates/ISO loss costs for liability, physical damage, medical payments and basic no-fault coverages by the PPT Use Factor.

89. NON-OWNERSHIP LIABILITY

Class Codes 6638, 6639 and 6640 in table 89.C.1a.(1)(LC) are replaced by the following:

	Total Number	Liability Base
Class Code	of Employees	Loss Cost
6601	0 - 25	\$ 139

90. HIRED AUTOS

- B. Cost of Hire Basis Liability Coverage
 - 3. Premium Computation
 - g. The minimum premium for hired auto liability coverage at basic limits is **\$100.** If the minimum premium is charged and the cost of hire is not known, use Class Code 6619.

- C. Cost of Hire Basis Physical Damage Coverages
 - 3. Premium Computation
 - e. The minimum premium for hired auto physical damage coverage is \$50. If the minimum premium is charged and the cost of hire is not known, use Class Code 6614.

ADDITIONAL RULE(S)

A5. BODY TYPE CLASSIFICATIONS AND RATING FACTORS

- 1. Trucks, Tractors and Trailers
 - a. Trucks, Truck-Tractors Multiply the sum of the Primary and Secondary Factors by the Body Type Factor
 - b. Trailers, Zone Rated Autos Multiply the Primary Factor by the Body Type Factor
- 2. Private Passenger Types
 - a. Multiply the PPT Use Factor by the Body Type Factor

			Body Type Factor		
	Code	Body Type	Liability	Physical Damage	
	Р	Pickup Truck	1.00	1.00	
	G	Refrigerated Truck	1.00	1.00	
	V	Van	1.00	1.00	
	В	Straight or Box Truck	1.00	1.00	
	D	Dump Truck	1.00	1.00	
Trucks,	W	Tow Truck	1.00	1.00	
Tractors	Ε	Stake Truck	1.00	1.00	
	F	Flatbed Truck	1.00	1.00	
	С	Car Carrier	1.00	1.00	
	R	Crane	1.00	1.00	
	M	Cement Mixer	1.00	1.00	
	Χ	Trucks or Tractors N.O.C.	1.00	1.00	
	1	Dump Trailer	1.00	1.00	
	2	Box Trailer	1.00	1.00	
Trailers	3	Flatbed Trailer	1.00	1.00	
Trailers	4	Refrigerated Trailer	1.00	1.00	
	5	Tank Trailer	1.00	1.00	
	6	Trailers N.O.C.	1.00	1.00	
	U	SUV or Utility Vehicle	1.13	1.00	
Private	Z	Sports Car	1.14	1.00	
Passenger	N	Minivan	0.95	1.00	
	K	Pickup Truck	1.03	1.00	
	Ι	Private Passenger N.O.C.	1.00	1.00	

Table A5. Body Type Factors

A6. DRIVER RATING

1. Driver Rating Factor

Each driver listed on the policy will be assigned a Driver Rating Factor based on the following criteria:

a. Driver Age Group - assign the driver an Age Group using the following table:

Driver Age	Age Group
under 18	1
18 - 21	2
22 - 24	3
25 - 29	4
30 - 39	5
40 - 64	6
65 - 70	7
71+	8

Table A6.1.a Driver Age Groups

 b. Driver Record Group - For drivers with an active license, assign the driver a Record Group by the number of Major Events, Moving Violations, and Accidents that have occurred in 36 months prior to the effective date of the policy.
 Drivers with an inactive license are automatically assigned to Record Group F. Assign the driver a Record Group using the following table:

License Status	Major Events	Moving Violations	Accidents	Record Group
Active	0	0	0	A
Active	0	0	1	В
Active	0	0	2	D
Active	0	0	3+	E
Active	0	1	0	В
Active	0	1	1	С
Active	0	1	2	D
Active	0	1	3+	F
Active	0	2	0	D
Active	0	2	1	E
Active	0	2	2+	F
Active	0	3+	0+	E
Active	1+	0+	0+	F
Inactive	0+	0+	0+	F

Table A6.1.b Driver Record Groups

c. Driver Rating Factor - use Driver Age Group, Driver Record Group, and the following table to determine each driver's Driver Rating Factor

Age	Record Group						
Group	Α	В	С	D	E	F	
1	1.150	1.323	1.482	1.582	1.725	2.300	
2	1.150	1.323	1.482	1.582	1.725	2.300	
3	1.100	1.265	1.417	1.513	1.650	2.200	
4	1.050	1.208	1.353	1.444	1.575	2.100	
5	1.050	1.208	1.353	1.444	1.575	2.100	
6	1.000	1.150	1.288	1.375	1.500	2.000	
7	1.050	1.208	1.353	1.444	1.575	2.100	
8	1.100	1.265	1.417	1.513	1.650	2.200	

Table A6.1.c Driver Rating Factors

2. Driver Multiplier

The Driver Multiplier is a policy-level rating factor and will be applied to the premium for each applicable coverage prior to applying any Experience or Scheduled Modification factors. The Driver Multiplier will not be applied to the following coverages: Uninsured Motorists, Comprehensive, Specified Causes of Loss Physical Damage Coverage, Rental Reimbursement, Towing and Labor, Audio/Visual/Data Electronic Equipment, Tapes/Records/Discs, and any flat charges.

Determine the Driver Multiplier using the following rules:

a. When the number of drivers is greater than or equal to the number of power units on the policy, the Driver Multiplier is a straight average of all of the Driver Rating Factors on the policy, rounded to 3 decimal places.

Example - Policy with 3 power units and 3 drivers

```
Driver Rating Factor - Driver 1 = 1.150

Driver Rating Factor - Driver 2 = 1.000

Driver Rating Factor - Driver 3 = 1.020

(1.150 + 1.000 + 1.020) / 3 = 1.057 = Driver Multiplier
```

b. When the number of drivers is <u>less than</u> the number of power units on the policy, define the number of unassigned drivers to be the number of power units on the policy minus the number of drivers. Use a Driver Rating Factor of 1.10 for each unassigned driver. The Driver Multiplier is a straight average of all of the Driver Rating Factors on the policy,

Example - Policy with 4 power units and 3 drivers

 Driver Rating Factor - Driver 1
 =
 1.150

 Driver Rating Factor - Driver 2
 =
 1.000

 Driver Rating Factor - Driver 3
 =
 1.020

 Unassigned Driver Factor
 =
 1.100

(1.150 + 1.000 + 1.020 + 1.100) / 4 = 1.068 = Driver Multiplier

A7. AVENUE PRICING

1. Policy Type - determine the Policy Type using the table below

Policy Type	Description
PP	Policy has one or more power units, all of which are Private Passenger Types
LP	Policy has one or more power units, at least one Light Truck, and all of the power units are either Private Passenger Types or Light Trucks
MM	Policy has at least one power unit that is a Medium Truck, Heavy Truck, Heavy Truck-Tractor,
	Extra Heavy Truck, or Extra Heavy Truck-Tractor and the ratio of Medium, Heavy and Extra Heavy Trucks to the total number of power units is less than 25%
MH	Policy has at least one power unit that is a Medium Truck, Heavy Truck, Heavy Truck-Tractor,
	Extra Heavy Truck, or Extra Heavy Truck-Tractor and the ratio of Medium, Heavy and Extra Heavy
	Trucks to the total number of power units is greater than or equal to 25%
AO	Policies that are not otherwise classifed above

Table A7.1 Policy Types

2. Liability Group - determine the Liability Group using the table below

Liability Group	Description
L1	Minimum Combined Single Limit of Liability on policy is less than \$1,000,000
L2	Minimum Combined Single Limit of Liability on policy is greater than or equal to \$1,000,000
13	Policy has no liability coverage

Table A7.2 Liability Groups

3. Business Type - determine the Business Type of the Insured using the table below

Business Type	Description
A	Corporation or Municipality
В	Partnership or Limited Liability
С	Individually Owned
D	All Other Business Types

Table A7.3 Business Types

4. Power Unit Class - determine the Power Unit Class using the table below

Power Unit Class	Description
0	Policy has no power units
1	Policy has 1 power unit
2	Policy has 2 power units
3	Policy has 3 power units
4	Policy has 4 power units
5	Policy has 5 power units
6	Policy has 6 power units
7	Policy has 7 power units
8	Policy has 8 power units
9	Policy has 9 power units
10	Policy has 10 or more power units

Table A7.4 Power Unit Classes

5. Industry Group - determine the Industry Group using the table below

Industry Group		try Group Characteris s with characteristics	
maustry Group	Expected Loss Ratio vs. Target	Frequency vs.	Expected Loss Severity vs. Average
Α	At least 25% lower	Substantially Lower	Substantially Lower
В	At least 20% lower	Considerably Lower	Considerably Lower
С	At least 15% lower	Lower	Lower
D	At least 10% lower	Somewhat Lower	Somewhat Lower

E	At least 5% lower	and/or Marginally Favorable		and/or	Marginally Favorable
F	At target	Average			Average
G	At least 5% higher		Marginally Adverse		Marginally Adverse
Н	At least 10% higher		Somewhat Higher		Somewhat Higher
I	At least 15% higher		Higher		Higher
J	At least 20% higher		Considerably Higher		Considerably Higher
K	At least 25% higher		Substantially Higher		Substantially Higher

Policy

Avenue

101

101A

101B

102

102A

103

103A 104

104A

104B

105

Avenue Pricing

Multiplier

0.750

0.800

0.850

0.900

0.950

1.000

1.100

1.150

1.200 1.250

Table A7.5 Industry Groups

6. Policy Avenue and Avenue Pricing Multipliers

a. Policy Types PP, LP, MH and AO

Assign a Policy Avenue from 1 to 100 using the policy attributes determined in preceding rules 1-5. For Power Unit Class 10, refer to underwriting rules for placement into a Policy Avenue from 101 to 105.

b. Policy Type MM

Refer to underwriting rules for placement into a Policy Avenue from 101 to 105.

Policy Avenue	Avenue Pricing Multiplier	Policy Avenue	Avenue Pricing Multiplier	
1	0.400	51	0.900	
2	0.410	52	0.910	-
3	0.420	53	0.920	-
4	0.430	54	0.930	
5	0.440	55	0.940	-
6	0.450	56	0.950	-
7	0.460	57	0.960	-
8	0.470	58	0.970	
9	0.480	59	0.980	
10	0.490	60	0.990	
11	0.500	61	1.000	
12	0.510	62	1.010	
13	0.520	63	1.020	
14	0.530	64	1.030	1
15	0.540	65	1.040	1
16	0.550	66	1.050	
17	0.560	67	1.060	1
18	0.570	68	1.070	
19	0.580	69	1.080	
20	0.590	70	1.090	1
21	0.600	71	1.100	1
22	0.610	72	1.110	1
23	0.620	73	1.120	1
24	0.630	74	1.130	
25	0.640	75	1.140	
26	0.650	76	1.150	
27	0.660	77	1.160	
28	0.670	78	1.170	
29	0.680	79	1.180	
30	0.690	80	1.190	
31	0.700	81	1.200	
32	0.710	82	1.210	
33	0.720	83	1.220	
34	0.730	84	1.230	
35	0.740	85	1.240	
36	0.750	86	1.250	
37	0.760	87	1.260	
38	0.770	88	1.270	
39	0.780	89	1.280	
40	0.790	90	1.290	
41	0.800	91	1.300	
42	0.810	92	1.310	
43	0.820	93	1.320	
44	0.830	94	1.330	
45	0.840	95	1.340	
46	0.850	96	1.350	_
47	0.860	97	1.360	
48	0.870	98	1.370	

49	0.880	99	1.380
50	0.890	100	1.390

Table A7.6 Avenue Pricing Multipliers

c. The Avenue Pricing Multiplier will be applied to the premium for each applicable coverage prior to applying any Experience or Scheduled Modification factors. The Avenue Pricing Multiplier will not be applied to Uninsured Motorists Coverages or any flat charges.

COMMERCIAL AUTO LIABILITY EXPERIENCE AND SCHEDULE RATING PLAN

Rule 2.C Expected Loss Ratio is 48.5%

Rule 2.E Eligibility for Schedule Rating

Paragraph 2.E is replaced by the following:

E. Eligibility for Schedule Rating

Any risk that develops a premium of \$500 for the exposures to be rated shall be eligible for the application of the schedule rating modification provisions of this Plan.

Rule 5.H Actual Experience Ratio

The following is added to Paragraph 5.H:

If the experience modification is a credit, the maximum allowable credit is limited to 40%.

If the experience modification is a debit, the maximum allowable debit is limited to 40%.

COMMERCIAL AUTO PHYSICAL DAMAGE EXPERIENCE AND SCHEDULE RATING PLAN

Rule 2.B Expected Loss Ratio is 41.0%

Rule 2.D Eligibility for Schedule Rating

Paragraph 2.D is replaced by the following:

D. Eligibility for Schedule Rating

Any risk that develops a premium of \$500 for the exposures to be rated shall be eligible for the application of the schedule rating modification provisions of this Plan.

Rule 5.F Experience Modification

The following is added to Paragraph 5.F:

If the experience modification is a credit, the maximum allowable credit is limited to 40%.

If the experience modification is a debit, the maximum allowable debit is limited to 40%.

COMMERCIAL LINES MANUAL DIVISION ONE AUTOMOBILE

DISTRICT OF COLUMBIA (08) TERRITORY 101

LOSS COST PAGES ALLMERICA FINANCIAL BENEFIT INSURANCE COMPANY

LIABILITY
Limit of Liab. \$100,000
RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS
\$ 694
RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS
\$ 484
RULE 40. PUBLIC AUTO CLASSIFICATIONS -
- TAXICABS AND LIMOUSINES
\$ 4,303
- SCHOOL AND CHURCH BUSES
\$ 382
- OTHER BUSES
\$ 2,637
- VAN POOLS
\$ 1,041
For liability increased limits factors, refer to Rule 100.
For liability fleet factors, refer to Rules 22. and 39.
For Medical Payments, refer to Rules 49. and 92., as applicable.
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COMMERCIAL LINES MANUAL DIVISION ONE AUTOMOBILE LOSS COST PAGES

DISTRICT OF COLUMBIA (08) TERRITORY 101

ALLMERICA FINANCIAL BENEFIT INSURANCE COMPANY

PHYSICA	L DAM	AGE					
Original Co	st New F	Range					
\$15,00°	- 20,00	00					
	Spe	cified	\$50	00	\$	500	
	Ca	uses	De	ed.		Ded.	
	Of	Loss	Comp.		Coll.		
RULE 23. TRUCKS, TRACTORS AND TRAILERS CLASSIFICATIONS							
- Local And Intermediate - All Vehicles							
- Long Distance - Light Trucks and Trailers Used with Light Trucks							
- 0	\$	55	\$	77	\$	216	
RULE 32. PRIVATE PASSENGER TYPES CLASSIFICATIONS							
	N	N/A	\$	89	\$	370	
RULE 40. PUBLIC AUTO CLASSIFICATIONS							
- TAXICABS AND LIMOUSINES							
	\$	56	\$	79	\$	274	
- SCHOOL AND CHURCH BUSES							
	\$	39	\$	54	\$	140	
- OTHER BUSES							
	\$	39	\$	54	\$	140	
- VAN POOLS							
	\$	56	\$	79	\$	274	

- For physical damage fleet factors, refer to Rules 22. and 39.
- For additional coverages, refer to the Additional Coverages Table in Rules 23. and 40.
- For Deductible factors, refer to Rule 98.
- For Original Cost New and Age Group factors, refer to Rule 101.
- For Stated Amount factors, refer to Rule 101.
- For Towing and Labor Costs Coverage rating, refer to Rule 34.

90. HIRED AUTOS

Cost of Hire Basis - All Territories Liability Base Loss Cost \$1.21

Table 90.B.3.b.(LC) Cost Of Hire Basis Liability Loss Cost

(The remainder of the Hired Auto loss costs are unchanged.)

State: District of Columbia Filing Company: Allmerica Financial Benefit Insurance Company

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: DC- CAPE Auto Filing

Project Name/Number: Commercial Lines/CA /DC-CA-19657

Supporting Document Schedules

Bypassed - Item:	Consulting Authorization
Bypass Reason:	N/A - we are not a third party filer
Attachment(s):	
Item Status:	
Status Date:	
Satisfied - Item:	Actuarial Certification (P&C)
Comments:	
Attachment(s):	Motor Vehicle Ins. Rate & Rule Filing Certification - Cape.pdf
Item Status:	g comments of performance and g comments of the performance and th
Status Date:	
Satisfied - Item:	District of Columbia and Countrywide Experience for the Last 5 Years (P&C)
Comments:	
Attachment(s):	DC Experience Worksheet - Cape.pdf
Item Status:	
Status Date:	
Satisfied - Item:	District of Columbia and Countrywide Loss Ratio Analysis (P&C)
Comments:	
Attachment(s):	IRR Memo & Exhibits.pdf
Item Status:	
Status Date:	
Satisfied - Item:	Explanatory Memo
Comments:	
Attachment(s):	DC Cape Explanatory Memo.pdf
Item Status:	
Status Date:	
Satisfied - Item:	Support Documents
Comments:	
Attachment(s):	Exhibit 1 - State Indication.pdf Exhibit 2 ~ CAPE.pdf
Item Status:	

State: District of Columbia Filing Company: Allmerica Financial Benefit Insurance Company

TOI/Sub-TOI: 20.0 Commercial Auto/20.0000 Commercial Auto Combinations

Product Name: DC- CAPE Auto Filing

Project Name/Number: Commercial Lines/CA /DC-CA-19657

Status Date:

DISTRICT OF COLUMBIA DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS INSURANCE ADMINISTRATION

MOTOR VEHICLE INSURANCE RATE AND RULE FILING CERTIFICATION

	Allmerica Financial Benefit					
В.	Date of Filing:	Pı	roposed Effective Dat	te 3/1/2020	_	
C.	Private Passenger Automobi	le				
	Commercial Automobile		x			
۷ot	tes:A Premium Survey I	orm must	be attached to every	private passenger au	tomobile filing.	
	commercial, checke	d above.	e answered in refer	•	•	e passenger o
).	Briefly state the purpose of the With this filing, we are revi		roprietary loss cost	s for PPT, TTT, Pub	lic, and Hired Aut	o vehicle
	types. These loss costs w	ill mirror th	nose filed in ISO refe	erence filing CA-201	9-BRLA1. We are	e also
	updating Hired Auto minim					stem
	limitations and typo correct	tion on BA	A Coverage Broaden	ing Endorsement c	lass code.	
Ε.	Is this an independent filing rating organization	No a ?	"me too" filing N	or a filing rela	ated to the approve	ed filing of a
	If not an independent filing, s	specify the a	approval date and ref	erence number (if ap	plicable) of the rela	
.	List all rate level changes for	the District				ated filing.
		uie District	for the last five years	S :		ated filing.
	Effective Date	the District	for the last five years		vel Change	ated filing.
	Effective Date		for the last five years	Overall Rate Lev		ated filing.
	12/1/2015	THE DISTRICT	t for the last five years	Overall Rate Lev)	ated filing.
	12/1/2015 2/1/2018		t for the last five years	Overall Rate Lev)	ated filing.
	12/1/2015		t for the last five years	Overall Rate Lev 11.3% 0.1%)	ated filing.
3 .	12/1/2015 2/1/2018	per of polici	es in force in the Dist	Overall Rate Lev 11.3% 0.1% 6.3% rict of Columbia over	the last five years:	
3 .	12/1/2015 2/1/2018 2/1/2019	per of polici	es in force in the Dist lumber Of CAPE Po	Overall Rate Level 11.3% 0.1% 6.3% rict of Columbia over	the last five years:	
Э.	12/1/2015 2/1/2018 2/1/2019	per of polici	es in force in the Dist lumber Of CAPE Po	Overall Rate Lev 11.3% 0.1% 6.3% rict of Columbia over	the last five years:	<u> </u>
	12/1/2015 2/1/2018 2/1/2019 Show the growth in the number	per of polici <u>N</u> Volu	es in force in the Dist lumber Of CAPE Po ntary <u>Renewal</u>	Overall Rate Lev 11.3% 0.1% 6.3% rict of Columbia over licies In Force As O Assigned Risk	the last five years: f December 31 st Grand Total	Percent Growth
ōth	12/1/2015 2/1/2018 2/1/2019 Show the growth in the numb Prior Year 20 14	per of polici New 20	es in force in the Dist lumber Of CAPE Po ntary <u>Renewal</u>	Overall Rate Lev 11.3% 0.1% 6.3% rict of Columbia over licies In Force As O Assigned Risk	the last five years: f December 31 st Grand Total	Percent Growth
5th 4th	12/1/2015 2/1/2018 2/1/2019 Show the growth in the number of the second	per of polici Nolu New 20 14	es in force in the Dist lumber Of CAPE Pontary Renewal	Overall Rate Lev 11.3% 0.1% 6.3% rict of Columbia over licies In Force As O Assigned Risk 0 0	the last five years: f December 31 st Grand Total 48 51	Percent Growth XXX 6%
4th 3rd	12/1/2015 2/1/2018 2/1/2019 Show the growth in the numb Prior Year 20 14	per of polici New 20	es in force in the Dist lumber Of CAPE Po ntary <u>Renewal</u>	Overall Rate Lev 11.3% 0.1% 6.3% rict of Columbia over licies In Force As O Assigned Risk	the last five years: f December 31 st Grand Total	Percent Growth

1

H. Show the maximum and minimum rate level effect of this filing by coverage. These effects shall illustrate the maximum filing by coverage. These effects shall illustrate the maximum increase (or smallest decrease) and minimum increase (or largest decrease) which will result to any insured from the proposed changes to rates and rating factors.

The calculation of these effects shall be: the proposed change in the base rate, times the maximum (or minimum) change to each rating factor affecting that coverage.

For instance, a rate revision could include changes to classification factors, increased limit factors, deductible relativities, and model year/symbol factors.

For bodily injury, the maximum change would be the base rate change times the maximum change to classification factors times the maximum change to increased limits factors. The minimum change would be the base rate change times the minimum change to each of these rating factors. For collision coverage, a similar calculation would be done using different rating factors.

<u>Coverage</u>	Percentage Rate Minimum	Level Changes <u>Maximum</u>
Bodily Injury		
Property Damage Collision	0.0%	6.02%
Comprehensive	0.0%	0.0%
Uninsured Motorists	0.0%	0.0%
Towing and Labor	0.0%	0.0%
Personal Injury Protection	0.0%	0.0%
Other (Combined Single Limit + Med Pay)	0.0%	50.1%
All	0.0%	50.1%
I. Please provide information on the actuarial supporting data: (1) Calendar Year	Basic Limits Total Limits	see Exhibit 1

If total limits data has been provided, specify the part of the filing which illustrates how large losses have been considered:

Exhibit 1, pages 3-5. Incurred Losses are limited to \$250,000 and a large loss (percent of premium) load is applied based on our Countrywide loss experience

(2) All rate filings shall mathematically consider investment income, pursuant to <u>D.C.</u> <u>Code</u>, Section 35-1703 (h), 1981 Edition (as amended). Specify the part of the filing which mathematically determines investment income:

See Investment Income Exhibit

- (3) Please provide a chart showing the number of earned exposures for each coverage and each year of experience. See Exhibit 2
- (4) Please provide a chart showing the actual written premium by coverage which was used to calculate the overall percentage rate change. See Exhibit 2
- J. The following data should be part of the data submitted on page 14 of the Annual Statement for the most recent two years for the District of Columbia; only voluntary (not assigned risk) business shall be shown:

Most Recent Year (2018)

	Direct Pr	<u>emiums</u>	<u>Direct</u>	Losses
Coverage	<u>Written</u>	Earned	<u>Paid</u>	<u>Incurred</u>
Bodily Injury				
Property Damage				
Uninsured Motorist				
Other Liability (CSL + Med Pay)	504,979	438,937	9,273	191,595
Total	504,979	438,937	9,273	191,595
Personal Injury Protection	6,190	5,307		-79,975
Collision				
Comprehensive				
Other Physical Damage	103,534	87,947	84,524	3,504
Total	103,534	87,947	84,524	3,504
F 527 UNIFORM		Z		

Prior Year (2017)

	Direct Pr	remiums	Direct	Losses
Coverage	Written	Earned	Paid	Incurred
Bodily Injury	<u> </u>			
Property Damage				
Uninsured Motorist				
Other Liability (CSL + Med Pay)	435,659	435,998	-38,479	299,716
Total	435,659	435,998	-38,479	299,716
Personal Injury Protection	5,753	6,142	3,126	20,484
Collision				
Comprehensive				
Other Physical Damage	93,783	100,641	72,285	3,932
Total	99,536	106,783	75,411	24,416
Underwriting Income/Earned Premiur	ms	49.4%		
As an authorized representative of the and belief the attached filing complies		-	-	
Levi Kamenetsky	, FCAS		We y	
NAME OF AUTHORIZED REI	PRESENTATIVE		SIGNATURE	
AVP, Commercia	ıl Auto		508-855-4021	
TITLE			TELEPHONE NUMBI	ER

DISTRICT OF COLUMBIA EXPERIENCE WORKSHEET

District of Columbia

	20 14	20 <u>15</u>	20 <u>16</u>	20 <u>17</u>	20 18
Written Premium	351,645	426,724	538,736	535,195	608,513
Policy Inforce	48	51	66	59	79
Rate Changes	n/a	11.3%	n/a	n/a	0.1%
		Countrywi	de		
	20 <u>14</u>	20 <u>15</u>	20 <u>16</u>	20 <u>17</u>	20 <u>18</u>
Written Premium	164,256,225	175,590,189	192,630,476	216,932,753	225,358,658
Policy Inforce	28,020	27,805	27,925	30,074	29,967
Rate Changes	5.8%	6.8%	0.9%	1.6%	6.2%

Reflection of Investment Income in Rates Commercial Auto District of Columbia

The Hanover Insurance Group utilizes an internal rate of return (IRR) model on a net of reinsurance basis to determine the profit provision for our various lines of business. The IRR is the expected rate of return generated from modeling insurance company operations. Hanover targets a 13% after-tax rate of return. This implies that the underwriting and investment income attributable to the insurance transaction yields a 13% return on the shareholders' equity to support the insurance writings. The IRR model produces a target combined ratio on a net basis. The net target combined ratio is then converted to a direct basis with the assumption that the profit is not attributable to the ceded premium because reinsurer's profit is contemplated in the reinsurance margin. The conversion is based on the following formula:

Direct Target	_	(Net Premium @ 13% Rate of Return × Net Target Combined Ratio) + Ceded Premium	
Combined Ratio		Total Direct Premium	

The results are shown in Table 4. Details regarding the expense, loss and surplus assumptions are summarized below.

The IRR model is a single policyholder model, i.e. the profit provision is determined by modeling the cash flows for a hypothetical policyholder. The cash flows in the IRR model can be segregated into three categories: premium, loss and expense.

The expenses assumed in this model are countrywide line-of-business-specific figures, shown in Table 3. The split of the general and other acquisition expenses between fixed and variable is based on a review of our Insurance Expense Exhibit.

To properly model the cash flows, we need to estimate when the premium is collected and expenses are paid. The premium collection pattern is based on a countrywide analysis of the payment plans for the line of business. Premium is earned evenly over the policy term. The expenses are paid as premium is earned.

The loss and DCCE payment pattern is based on a countrywide analysis of our net paid and incurred loss development triangles. The ultimate net loss ratio is based on the prospective estimate obtained from our planning process. The undiscounted loss and DCCE reserve represents the difference between the incurred loss and DCCE and any payments made to date. The published IRS discount factors are utilized to determine the discounted loss reserve used in the income tax calculation.

The required surplus associated with the transaction changes over time and is related to the sum of the unearned premium and loss reserves based on the reserve-to-surplus (R:S) and premium-to-surplus (P:S) ratio assumptions. To obtain the line of business P:S ratios, a companywide total required surplus is allocated to individual lines of business based on the risks associated with each of the lines. These risks include underwriting (both catastrophe and excluding catastrophe), reserving, investment, credit and operational. The total assets are the sum of the unearned premium and loss reserves plus the required surplus. The assets available for investment are the total assets less any premium receivable and expenses paid.

The investment income is that attributable to the average investable assets from the balance sheet in the model. The pre-tax investment yield used in the model is determined based on a combination of yields from existing and newly-invested assets. The underwriting income represents the difference between earned premium and incurred loss and expense. The model assumes expense is incurred based on each expense component's assumed patterns. The change in surplus represents the difference between the ending and beginning required surplus from the balance sheet. The post-tax equity flow is the difference between the pre-tax income and the change in surplus adjusted for the estimated income tax. These equity flows are evaluated to determine the implied internal rate of return.

The Hanover Insurance Group Internal Rate of Return Calculation **Commercial Auto Liability**

TARI F 1: Key Target Inputs

TABLE 1: Key Target Inputs	
Target ROE	13.0%
Premium-to-Surplus	2.16
Reserve-to-Surplus	4.50
Tax Rate	21.0%
Pre-Tax Investment Yield	3.7%
Initial Premium	1,000
Net-to-Direct Ratio	99.6%

TABLE 2: Loss Ratio inputs	
Expected Ex Cat Loss Ratio	60.6%
Expected Cat Ratio	0.0%
DCCE (% loss)	8.4%

TABLE 5: Internal Rate of Return Analysis

			Period		Prem			nium	ium Expenses			ses Incl. AOE Losses + Do			CCE Including Catastrophe			phes	
			NPV		Written			Earned											
_	Quarter			IRS	Ī				Unea	rned				C I-		D-	اد:	1 0	DOOF
Year	ā	Mid	Factor	Discount		Collec	cted		Prem	ium				Case in	curred	Pa	iid	Loss &	
	ಠ		@	Factor					Rese	erve								Rese	erve
			13.0%			F	Rcvble		End	Avg	Inc'd	Paid	Resv	%	\$	%	\$	End	Avg
0	0	0	1.00	1.00	1,120	13%	973		1,120		220	220				0%		-	
1	1	1/8	0.98	0.94		26%	686	280	840	980	58	45	14	25%	164	2%	12	152	76
1	2	3/8	0.96	0.94		26%	398	280	560	700	58	45	27	25%	164	4%	25	291	222
1	3	5/8	0.93	0.94		26%	112	280	280	420	58	46	39	25%	164	5%	35	421	356
1	4	7/8	0.90	0.94		10%		280		140	58	46	51	25%	164	6%	41	544	482
2	1	1 1/8	0.87	0.94		0%						25	27			6%	37	507	526
2	2	1 3/8	0.85	0.94		0%						2	24			5%	31	476	492
2	3	1 5/8	0.82	0.94		0%						2	22			5%	31	445	460
2	4	1 7/8	0.80	0.94		0%						2	20			5%	33	412	428
3	1	2 1/8	0.77	0.95		0%						2	18			5%	33	379	395
3	2	2 3/8	0.75	0.95		0%						2	17			5%	35	344	361
3	3	2 5/8	0.73	0.95		0%						2	15			5%	35	309	327
3	4	2 7/8	0.70	0.95 0.95		0% 0%						2 2	13 12			5% 5%	34	275	292
4	1	3 1/8	0.68														33	242	259
4	2	3 3/8	0.66	0.95		0% 0%						2 1	10 9			5%	31	211	227 196
4	3 4	3 5/8 3 7/8	0.64 0.62	0.95 0.95		0% 0%						1	7			4% 4%	29 27	182 155	168
5	4	4 1/2	0.62	0.95		0%						4				12%	27 81	74	115
6	4	5 1/2	0.56	0.95		0%						2	2			7%	43	32	53
7	4	6 1/2	0.31	0.95		0%						1	1			3%	17	15	23
8	4	7 1/2	0.43	0.95		0%						0	0			1%	9	6	10
9	4	8 1/2	0.35	0.96		0%						0	0			1%	1	2	4
10	4	9 1/2	0.33	0.98		0%						0	0			0%	1	1	2
11	4	10 1/2	0.28	0.98		0%						0	0			0%	1	0	1
12	4	11 1/2	0.25	0.98		0%						0	0			0%	0	0	0
13	4	12 1/2	0.22	0.98		0%					•••••	0	0			0%	0	0	0
14	4	13 1/2	0.19	0.98		0%						0	0			0%	0	0	0
15	4	14 1/2	0.17	0.98		0%						0	0			0%	0	0	0
16	4	15 1/2	0.15	0.98		0%						0	0			0%	0	0	0
17	4	14 1/2	0.17	0.98		0%					•••••	0	0			0%	0	0	0
18	4	17 1/2	0.12	0.98		0%						0	0			0%	0	0	0
19	4	18 1/2	0.10	0.98		0%						0	0			0%	0	0	0
20	4	19 1/2	0.09	0.98		0%						0	0			0%	0	0	0
21	4	20 1/2	0.08	0.98		0%						0	0			0%	0	0	0
22	4	21 1/2	0.07	0.98		0%						0	0			0%	0	0	0
23	4	22 1/2	0.06	0.98		0%						0	0			0%	0	0	0
24	4	23 1/2	0.06	0.98		0%						0	0			0%	0	0	0
25	4	24 1/2	0.05	0.98		0%						0	0			0%	0	0	0
26	4	25 1/2	0.04	0.98		0%						0	0			0%	0	0	0
27	4	26 1/2	0.04	0.98		0%						0	0			0%	0	0	0
28	4	27 1/2	0.03	0.98	ļ	0%						0	0			0%	0	0	0
29	4	28 1/2	0.03	0.98		0%						0	0			0%	0	0	0
30	. 4	29 1/2	0.03	0.98	4.406	0%		4.400			4	0	0	1000/	056	0%	0	(0)	0
Tota	ai				1,120	100%		1,120			454	454		100%	656	100%	656		

1,467 1,525 Average Reserve Balance 560 87 Average Weighted Life 0.38 0.50 0.46 1.62 2.82 2.01

The Hanover Insurance Group Internal Rate of Return Calculation Commercial Auto Liability

TABLE 3: Expense / Misc Income Inputs

TABLE 3. Expense / Misc	moomo mpa	
	% of prem	% fixed
Commissions	14.7%	0%
Contingent Commissions	2.0%	0%
Premium Tax	2.4%	0%
General Expenses	11.2%	50%
Other Acquisitions	5.6%	50%
Dividends	0.0%	0%
Reinsurance	0.0%	100%
AOE ("ULAE")	6.3%	100%
Subtotal	42.1%	
Miscellaneous Income	0.27%	0%
Other Operating Expenses	0.1%	0%
Interest Expense	0.7%	

TABLE 4: Key Target Results After Iteration	
-	
Final Direct Combined Ratio	98.2%
Direct Profit & Contingencies Provision	1.8%

TABLE 5: Internal Rate of Return Analysis

		.,	: internai Ra Ur		ng Income				Surp	lus			Inves	tment In	come	
					ax Rate:	21.0%		R/S:	4.50	P/S:	2.16	Averen	BT yield	Tax	AT yield	
Year	Quarter	PreTax	Change in Tax Reserves	Misc Income	Taxable Income	Tax	Net	UEPR + Loss Resv	Required			Average Investible Assets	3.7%	21.0%	2.9%	Equity Flow
			116361163						End	Avg	Chg		Amt	Tax	Net	
0	0 1	(220)	-		4 12		(220)	1,120	249		249	-				(469)
1		58	155	1		3	55	992	220	235	(28)	468	4	1	3	87
1	2	58	155	1	11	2	56	851	189	205	(31)	604	6	1	4	92
1	3	58	156	1	11	2	56	701	156	172	(33)	726	7 7	1	5	95
2	4 1	58	156 6	1	10	2	56 1	544 507	121 113	138	(35)	750	, , , , , , , , , , , , , , , , , , ,	1 1	<u>5</u> 5	97 14
2	2	-	2		(6) (2)	(1) (0)	0	476	106	117 109	(8) (7)	682 626	6	1	5 5	12
2	3	-	2		(2)	(0)	0	445	99	109	(7)	586	5	1	4	12
2	4	_	2		(2)	(0)	0	412	92	95	(7)	545	5	1	4	12
3	1	-	4		(4)	(1)	1	379	<u>52</u> 84	88	(7)	502	5	1	4	12
3	2	_	2		(2)	(0)	Ö	344	76	80	(8)	459	4	1	3	11
3	3	_	2		(2)	(0)	0	309	69	73	(8)	415	4	1	3	11
3	4	_	2		(2)	(0)	0	275	61	65	(8)	371	3	1	3	11
4	1	-	2		(2)	(0)	0	242	54	58	(7)	329	3	1	2	10
4	2	-	2		(2)	(0)	0	211	47	50	(7)	288	3	1	2	9
4	3	-	1		(1)	(0)	0	182	40	44	(6)	250	2	0	2	9
4	4	-	1		(1)	(0)	0	155	34	37	(6)	214	2	0	<u>2</u> 4	8
5	4	-	4		(4)	(1)	1	74	34 17	26	(18)	146	<u>2</u> 5	1	4	23
6	4	-	2		(2)	(0)	0	32	7	12	(10)	67	2	1	2	12
7	4	-	1		(1)	(0)	0	15	3	5	(4)	29	1	0	1	5
8	4	-	0		(0)	(0)	0	6	1	2	(2)	13	0	0	0	2
9	4	-	0		(0)	(0)	0	2	0	1	(1)	5	0	0	0	1
10	4	-	0		(0)	(0)	0	1	0	0	(0)	2	0	0	0	0
11	4	-	0		(0)	(0)	0	0	0	0	(0)	1	0	0	0	0
12	4	-	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
13	4	-	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
14	4	-	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
15	4	-	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
16	4	-	<u>0</u>		(0) (0)	(0) (0)	0 0	0	<u> </u>	0	(0) (0)	0	<u>0</u> 0	<u>0</u> 0	<u> </u>	0
17 18	4		0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
19	4	-	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
20	4		0		(0)	(0)	0	0	0	0	(0) (0)	0	0	0	0	0
21	4	-	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
22	4	_	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
23	4	-	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
24	4	_	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
25	4	-	0	• • • • • • • • • • • • • • • • • • • •	(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
26	4	-	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
27	4	-	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
28	4	-	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
29	4	-	0		(0)	(0)	0	0	0	0	(0)	0	0	0	0	0
30	4	-	0		(0)	(0)	0	(0)	(0)	0	(0)	0	0	0	0	0
Tota	l _	10		3	13	3	10	8,277					82	17	65	

Average Reserve Balance	2,167	463	2,218

NPV @	13.0%
UW Income	(5)
Inv Income	51
- Surplus	(46)
Total	0

The Hanover Insurance Group Internal Rate of Return Calculation **Commercial Auto Physical Damage**

TABLE 1: Key Target Inputs	
Target ROE	13.0%
Premium-to-Surplus	6.28
Reserve-to-Surplus	3.68
Tax Rate	21.0%
Pre-Tax Investment Yield	3.7%
Initial Premium	1,000
Net-to-Direct Ratio	99.7%

TABLE 2: Loss Ratio Inputs	
Expected Ex Cat Loss Ratio	58.1%
Expected Cat Ratio	4.8%
DCCE (% loss)	0.6%

TABLE 5: Internal Rate of Return Analysis

_		TABLE 5: Internal Rate of Return Analysis Time Period Premium Expenses Incl. AOE Losses + DCCE Including Cata					Cotootra:	haa											
		Time	Perioa	ı	10/2:44		Prer				Expen	ses inci	. AUE	Loss	ses + Du	CE INCI	uaing (atastrop	ones
	_		NPV	IRS	Written			Earned	Here	d									
Year	arte	Mid	Factor	Discount		0-11-			Unea					Case Ir	ncurred	Pa	id	Loss &	DCCE
×	Quarter	IVIIU	@			Colle	ected		Prem									Rese	erve
	Ö		40.00/	Factor		г	D I.I.	-	Rese		la ala	D-14	D	0/		0/	_		
_	_	_	13.0%	4.00	4 400	100/	Rcvble		End	Avg	Inc'd	Paid	Resv	%	\$	%	\$	End	Avg
0	0	0	1.00	1.00	1,108	13%	963		1,108	070	215	215		050/	450	0%			24
1	1	1/8	0.98	0.98		26%	679	277	831	970	58	49	9	25%	158		111	48	
1 1	2	3/8	0.96	0.98		26%	394	277	554	693	58	52	16	25%	158		160	46	47
1	3	5/8	0.93	0.98		26%	111	277	277	416	58	52	23	25%	158		158	46	46
1	<u>4</u> 1	7/8	0.90	0.98		10%		277		139	58	52	30	25%	158		158	47	47 14
2		1 1/8	0.87	0.97		0%						28	1			10%	65	(18)	
2	2	1 3/8	0.85	0.97		0%						1	1			-1%	-5	(13)	(16)
2	3	1 5/8	0.82	0.97		0%						1	0			-1%	-5	(9)	(11)
2	4	1 7/8	0.80	0.97		0%						1	-0			-1%	-3	(5)	(7) (5)
3	1	2 1/8	0.77	0.98		0%						(0)	-0			0%	-1	(4)	
3	2	2 3/8	0.75	0.98		0%						(0)	-0			0%	-1	(3)	(4)
3	3	2 5/8	0.73	0.98		0%						(0)	-0			0%	-1	(2)	(3)
3	4	2 7/8	0.70	0.98		0%						(0)	-0			0%	-1	(1)	(2) (1)
4	1	3 1/8	0.68	0.98		0%						(0)	-0			0%	-0	(1)	
4	2	3 3/8	0.66	0.98		0%						(0)	-0			0%	-0	(1)	(1)
4	3	3 5/8	0.64	0.98		0%						(0)	-0			0%	-0	(1)	(1)
4	4	3 7/8	0.62	0.98		0%						(0)	-0			0%	-0	(1)	(1) (0)
5	4	4 1/2	0.58	0.98		0%						(0)	-0			0%	-1	(0)	
6	4	5 1/2	0.51	0.98		0%						(0)	0			0%	-0	0	(0)
7	4	6 1/2	0.45	0.98		0%						0	-0			0%	0	(0)	0
8	4	7 1/2	0.40	0.98		0%						-	-0			0%		(0)	(0)
9	4	8 1/2	0.35	0.98		0%						-	-0			0%		(0)	(0)
10	4	9 1/2	0.31	0.98		0%						-	-0			0%		(0)	(0)
11	4	10 1/2	0.28	0.98		0%						-	-0			0%		(0)	(0)
12	4	11 1/2	0.25	0.98		0%						-	-0			0%		(0)	(0)
13	4	12 1/2	0.22	0.98		0%						-	-0			0%		(0)	(0)
14	4	13 1/2	0.19	0.98		0%						-	-0			0%		(0)	(0)
15	4	14 1/2	0.17	0.98		0%						-	-0			0%		(0)	(0)
16	4	15 1/2	0.15	0.98		0%							-0			0%		(0)	(0) (0)
17	4	14 1/2	0.17	0.98		0%						0	-0			0%	0	(0)	
18	4	17 1/2	0.12	0.98		0%						0	-0			0%	0	(0)	(0)
19	4	18 1/2	0.10	0.98		0%						0	-0			0%	0	(0)	(0)
20	4	19 1/2	0.09	0.98		0%						<u>0</u> 0	-0			0%	0	(0)	(0)
21	4	20 1/2	0.08	0.98		0%							-0			0%	0	(0)	(0)
22	4	21 1/2	0.07	0.98		0%						0	-0			0%	0	(0)	(0)
23	4	22 1/2	0.06	0.98		0%						0	-0			0%	0	(0)	(0)
24		23 1/2	0.06	0.98		0%		••••••				0	-0			0%		(0)	(0)
25	4	24 1/2	0.05	0.98		0%						-	-0			0% 0%	0	(0)	(0)
26	4	25 1/2	0.04	0.98		0%						0	-0			0% 0%	0	(0)	(0)
27	4	26 1/2	0.04	0.98		0%						0	-0			0%	0	(0)	(0)
28	4	27 1/2	0.03	0.98	 	0%							-0			0%	0	(0)	(0)
29	4	28 1/2 29 1/2	0.03	0.98 0.98		0% 0%						0	-0 -0			0% 0%	0	(0) (0)	(0)
30	•	29 1/2	0.03	0.98	4.400			4.400			440	- 440	-0	4000/	600		600	(U)	(0)
Tota	1 1				1,108	100%		1,108			449	449		100%	033	100%	633		

554 20 Average Reserve Balance Average Weighted Life 0.38 0.50 0.30 0.61 0.55 0.05

The Hanover Insurance Group Internal Rate of Return Calculation Commercial Auto Physical Damage

TABLE 3: Expense / Misc Income Inputs

TABLE 3. Expense / Misc	moonio mpa	
	% of prem	% fixed
Commissions	14.5%	0%
Contingent Commissions	2.2%	0%
Premium Tax	2.3%	0%
General Expenses	11.2%	50%
Other Acquisitions	5.6%	50%
Dividends	0.0%	0%
Reinsurance	0.0%	100%
AOE ("ULAE")	6.2%	100%
Subtotal	41.9%	
L., ., .		
Miscellaneous Income	0.27%	0%
Other Operating Expenses	0.1%	0%
Interest Expense	0.2%	

TABLE 4: Key Target Results After Iteration	
Final Direct Combined Ratio	97.3%
Direct Profit & Contingencies Provision	2.7%
3	

TABLE 5: Internal Rate of Return Analysis

		Underwriting Income						Surplus					Inves	tment In	come	
					ax Rate:	21.0%		R/S:	3.68	P/S:	6.28	Average	BT yield	Tax	AT yield	
Year	Quarter	PreTax	Change in Tax Reserves	Misc Income	Taxable Income	Tax	Net	UEPR + Loss Resv	Required			Investible Assets	3.7%	21.0%	2.9%	Equity Flow
			110301703						End	Avg	Chg		Amt	Tax	Net	
0	0 1	(215)	- 157		6 7	3	(215)	1,108	301	270	301	- 448			3	(517)
1		60 60	15 <i>7</i> 158	1	<i>7</i> 6	3 1	58	879 601	239	270	(62)	448 417	4	1	3	124
	2	60	158	1	6	1	60 60	601 323	163 88	126	(76) (75)	354	3	1	3	139 138
	4	60	158	1	6	1	60	323 47	13	50	(75) (75)	206	2	0	2	137
2	1	-	1		(1)	(0)	0	(18)	(5)	4	(18)	34	0	0	0	18
2	2	-	(0)		O´	0	(0)	(13)		(4)	1	(19)	(0)	(0)	(0)	(1)
2	3	-	(0)		0	0	(0)	`(9)		(3)	1	(14)		(0)	(0)	(1)
2	4	-	(0)		0	0	(0)	(5)	(1)	(2)	1	(9)	(0)	(0)	(0)	(1) (0)
3	1	-	(0)		0	0	(0)	(4)		(1)	0	(6)	(0)	(0)		(0)
3	2	-	(0)		0	0	(0)	(3)		(1)	0	(5)	(0)	(0)		(0)
3	3	-	(0)		0	0	(0)	(2)		(1)	0	(4)	(0)	(0)	(0)	(0)
3 4	4 1		(0)		0 0	<u>0</u> 0	(0)	(1)	(0)	(0)	0	(2)	(0)	(0)	(0) (0)	(0)
4	2	-	(0) (0)		0	0	(0) (0)	(1) (1)		(0) (0)	0	(2) (1)	(0) (0)	(0) (0)		(0)
4	3	_	(0)		0	0	(0)	(1)	` '	(0)	0	(1)	(0)	(0)	` ,	(0)
4	4	_	(0)		0	0	(0)	(1)		(0)	0		(0)	(0)		(0)
5	4	-	(0)		0	0	(0)	(0)	(0)	(0)	0	(1) (0)	(0)	(0)	(0)	(0) (0)
6	4	-	(0)		0	0	(0)	O O	O O	(0)	0	(0)	(0)	(0)		(0)
7	4	-	0		(0)	(0)	0	(0)	(0)	0	(0)	0	0	0	0	0
8	4	-	_		-	-	-	(0)	(0)	(0)	-	(0)	(0)	(0)		(0) (0)
9	4	-	-		-	-	-	(0)		(0)	-	(0)	(0)	(0)		(0)
10	4	-	-		-	-	-	(0)		(0)	-	(0)	(0)	(0)		(0)
11 12	4 4	-	-		-	-	-	(0) (0)		(0)	-	(0) (0)	(0)	(0)		(0)
13	4	<u>-</u> -	- -			- -		(0) (0)	(0) (0)	(0) (0)	- -	(0)	(0) (0)	(0) (0)		(0) (0)
14	4	-	-		-	-	- 1	(0)		(0)	-	(0)	(0)	(0)		(0)
15	4	-	-		_	_	-	(0)		(0)	_	(0)	(0)	(0)		(0)
16	4	-	-		-	-	-	(0)	(0)		-	(0)	(0)	(0)	(0)	(0)
17	4	-	0		(0)	(0)	0	(0)		(0) (0)	(0)	(0)	(0)	(0) (0)	(0)	(0)
18	4	-	0		(0)	(0)	0	(0)		(0)	(0)	(0)	(0)	(0)	(0)	(0)
19	4	-	0		(0)	(0)	0	(0)		(0)	(0)		(0)	(0)		(0)
20	4	-	0		(0)	(0)	0	(0)	(0)	(0) (0)	(0)	(0)	(0)	(0)	(0)	(0)
21	4	-	0		(0)	(0)	0	(0)	(0)		(0)	(0)	(0)	(0)		(0)
22	4	-	0		(0)	(0)	0	(0)		(0)	(0)	(0)	(0)	(0)		(0)
23 24	4 4	-	0		(0)	(0)	0	(0)		(0)	(0)	(0)	(0)	(0)		(0)
25	4		0		(0) (0)	(0) (0)	0	(0) (0)	(0) (0)	(0) (0)	(0) (0)	(0) (0)	(0) (0)	(0) (0)		(0)
26	4	-	0		(0)	(0)	0	(0)		(0)	(0)	(0)	(0)	(0)		(0)
27	4	-	0		(0)	(0)	0	(0)		(0)	(0)	(0)	(0)	(0)		(0)
28	4	_	0		(0)	(0)	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)		(0)
29	4	-	0		(0)	(0)	0	(0)	(0)	(0)	(0)		(0)	(0)		(0) (0)
30	4	-	-		- ` ′	- ` ′	-	(0)	(0)	(0)	- ` ′	(0)	(0)	(0)		(0)
Tota	ıl	26		3	29	6	23	2,898					13	3	10	

Average Reserve Balance	724	159	348

NPV @	13.0%
UW Income	9
Inv Income	10
- Surplus	(19)
Total	(0)

Allmerica Financial Benefit Insurance Company (AFBIC) Commercial Automobile District of Columbia

Explanatory Memorandum

The companies above hereby file revisions to our Commercial Automobile line of business effective March 1, 2020 for new and renewal business. The overall estimated rate impact is 5.1%.

The following revisions are proposed:

- 1. Loss Costs
- 2. Hired Auto Minimum Premium
- 3. Non-Ownership Liability
- 4. Business Auto Coverage Broadening Enorsement Class Code Correction

Below are detailed descriptions of each proposed change:

1. Loss Costs

With this filing, we are changing our proprietary loss costs for PPT, TTT, Public, and Hired Auto vehicle types. These loss costs will mirror those filed in ISO reference filing CA-2019-BRLA1. Please see Appendix A for more details.

2. Hired Auto Minimum Premium

With this filing, we are increasing the minimum premiums for Hired Auto liability coverage from \$75 to \$100 and the physical damage coverage from \$25 to \$50. Please see the state exception pages for more information.

3. Non-Ownership Liability

With this filing, we wish to adopt the ISO Rule 89. Non-Ownership Liability Loss Costs. However, due to system limitations, we cannot breakout the 0-25 category into three separate categories as ISO has implemented in CA-2019-BRLA1. Therefore, we propose to use the average loss costs of ISO's three categories (0-9, 10-19 and 20-25) as our single 0-25 loss cost. Arithmetically, this is (64+135+218)/3 = 139. Please see the attached exception pages displaying this proposed loss cost.

4. Business Auto Coverage Broadening Endorsement Class Code Correction

This is an editorial only update. We found that our state exception pages were incorrectly displaying the class code 9900 for the Business Auto Broadening Endorsement. This has been corrected to the class code 9990, and can be seen in the state exception pages with this filing. The change has no implications to rating.

Actuarial Indications Methodology

<u>Overall Approach</u>: The companies use a credibility weighted loss ratio approach to ratemaking. Statewide data is used as much as possible. When statewide data is not available, countrywide data is used in its place. The underlying experience is the most recent direct (before reinsurance) calendar/accident year data.

Premium: Earned premium is compiled on a calendar year basis.

On-Level Premiums: Premiums are adjusted to the current rate level by using the parallelogram method.

<u>Premium Trend</u>: Physical Damage premium is adjusted to reflect shifts in original cost new (OCN) exposures from the mid-point of each calendar year to one year past the effective date. We rely on exposure data contained in the latest approved Insurance Services Office (ISO) Commercial Auto Loss Cost filing, typically published annually.

<u>Losses</u>: Losses are direct incurred losses limited to \$250,000 per claim occurrence and excluding catastrophes. Incurred losses are net of salvage and subrogation and do not include any loss adjustment expenses. The incurred losses are for 12 month accident year periods.

<u>Loss Development</u>: Loss development factors are based on the latest 15 accident years of loss data. Losses underlying the LDFs are on the same basis as the losses above (i.e. incurred, limited to \$250,000 per claim, excluding catastrophes, net as to salvage and subrogation, and exclusive of all loss adjustment expenses. Loss Development Triangles evaluated as of year-end were used to calculate LDFs for ages 12 to ultimate, 24 to ultimate, 36 to ultimate, 48 to ultimate, etc. The reciprocal of the loss development factors were then interpolated using standard interpolation techniques to find the loss development factors used in the indication, for ages 18 to ultimate, 30 to ultimate, 42 to ultimate, 45 to ultimate, and 66 to ultimate.

<u>LAE Load</u>: The LAE Load is a countrywide factor which reflects all loss adjustments expenses (LAE), i.e. both defense cost containment expenses and other adjustment expenses. LAE based on countrywide Commercial Auto data developed from the Insurance Expense Exhibit (IEE). The LAE load is expressed as a percentage of earned premiums.

<u>Loss Trend</u>: Factors to adjust incurred losses to reflect changes in loss frequency and severity from the mid-point of each year of the experience period to one year past the proposed effective date. We have relied on the loss trend data contained in the ISO Commercial Auto Loss Cost reference filing for our trend selections.

<u>Excess Loss Factor</u>: Liability losses in excess of \$250,000 are considered in the excess loss factor. The excess loss factor is calculated based on 3 years of statewide historical losses that are developed to ultimate and the corresponding 3-year historical direct earned premium. The excess loss factor is expressed as a percent of premium.

<u>Excess Wind and Water Load:</u> ISO uses an excess wind and water procedure to smooth out catastrophe losses for Comprehensive (OTC) coverage. Since ISO has a much larger and credible database than we do, we feel that it is not necessary to make independent adjustments to this procedure. We use the same Excess Wind and Water methodology that ISO uses in their Loss Cost Circulars, the only exception being that we calculate the load for all vehicles combined rather than by vehicle type. The Comprehensive (OTC) Excess Wind and Water Load is also converted to a physical damage Excess Wind and Water Load by multiplying the load by the percent of physical damage losses that are Comprehensive, which is selected based off of the latest three years of The Hanover Insurance Group's physical damage experience. The analysis uses data contained in the ISO Commercial Auto Loss Cost filing, published annually. The excess wind and water load is expressed as a percent of losses.

<u>Accident Year Weights</u>: We judgmentally selected accident year weights that balance the responsiveness and stability of our data.

<u>Credibility Method</u>: We use a credibility approach to reflect the amount of weight to be applied to the statewide data as it relates to its predictive value. It is equal to: P / (P + K) where P = the five-year collected earned premiums and K = \$20,000,000 for Liability and No-Fault and \$2,000,000 for physical damage.

<u>Development of Expected Fixed and Variable Expense Ratios</u>: This is shown in Exhibit 1 – State Indication. Components are developed as follows:

- General and Other Acquisition Expenses use Countrywide IEE figures. General Expenses are considered 75% fixed and 25% variable. Other Acquisition Expenses are considered 33% fixed and 67% variable.
- Commissions and Taxes, Licenses and Fees use state P.14 figures. Both of these ratios are considered variable, as they are directly proportional to written premium.
- Profit and Contingencies, including Investment Income: We use an internal rate of return (IRR) model to
 determine the profit and contingencies provision after reflection of investment income. The IRR is the
 expected rate of return generated from modeling insurance company operations. Inputs to the model are
 shown in Exhibit 2 IRR Model Memo & Exhibits, Tables 1, 2 and 3. The modeled results are shown in
 Tables 5. Table 4 shows the final direct profit and contingencies provision.

Rate Level Impact Methodology

The overall estimated rate level effect was calculated using current inforce policies. Each policy was rated using current rates and rating factors. Each policy was then re-rated with the proposed rates. Premiums were then compared to each other to develop the overall rate level impact.

State Exception Pages

Enclosed are the revised state exception pages and Appendix A - DC Proprietary Loss Cost Pages.

Liability Coverages

Evaluation Date 7/31/2019							
State DC		Acc. Year 2014	Acc. Year 2015	Acc. Year 2016	Acc. Year 2017	Acc. Year 2018	5 Year Total
(1) Collected Earned Premiums		\$284,881	\$331,497	\$405,076	\$438,266	\$443,839	\$1,903,559
(2) On-Level Factor		1.011	1.011	1.011	1.011	1.024	\$1,903,339
(3) Premium at Current Rate Level	(1) * (2)	\$288,015	\$335,143	\$409,532	\$443,087	\$454,491	\$1,930,268
(4) Premium Trend	(-/ (-/	0.000	0.000	0.000	0.000	0.000	ψ±,330,200
(5) Trend Period ¹		6.592	5.592	4.592	3.592	2.592	
(6) Trend Feriod (6) Trend Factor	[1 + (4)] ^ (5)	1.000	1.000	1.000	1.000	1.000	
(7) Trended On-Level Premium	(3) * (6)	\$288,015	\$335,143	\$409,532	\$443,087	\$454,491	\$1,930,268
(7) Treflued Off-Level Freitham	(5) (6)	\$200,013	\$ 333,1 1 3	\$ 1 09,332	\$ТТЭ,007	ўТ ЈТ,ТЭ1	\$1,930,200
(8) Limited Incurred Losses (ex Cats)		\$37,095	\$48,440	\$103,876	\$102,262	\$84,563	\$376,236
(9) Loss Development Factor		1.004	1.010	1.026	1.071	1.193	4070,200
(10) Limited Ultimate Losses (ex Cats)	(8) * (9)	\$37,243	\$48,924	\$106,577	\$109,523	\$100,884	\$403,151
(11) Loss Trend		0.041	0.041	0.041	0.041	0.041	7/
(12) Trend Period ¹		6.592	5.592	4.592	3,592	2,592	
(13) Trend Factor	[1 + (11)] ^ (12)	1.303	1.252	1,203	1.155	1.110	
(14) Trended Limited Ultimate Incurred Losses	(13) * (14)	\$48,528	\$61,253	\$128,212	\$126,499	\$111,981	\$476,473
(15) LAE Load (% of Premium)		0.107	0.107	0.107	0.107	0.107	4,
(16) Excess Loss Factor (% of Premium)		0.034	0.034	0.034	0.034	0.034	
(17) Excess Wind & Water Load (% of Loss)		0.000	0.000	0.000	0.000	0.000	
(18) Adjusted Incurred Losses & LAE	{[(7)*(15)]+[(7)*(16)]+(14)}+[(14)*(17)]	\$89,138	\$108,508	\$185,956	\$188,974	\$176,064	\$748,641
(19) Adj. Incurred Loss & LAE Ratio	(18) / (7)	30.9%	32.4%	45.4%	42.6%	38.7%	
(20) Accident Year Weights		10.0%	15.0%	20.0%	25.0%	30.0%	100.0%
(21) Weighted Inc. Loss & LAE Ratio							39.3%
(22) Fixed Expenses:							10.4%
(23) Variable Expenses & Profit & Contingency:							26.5%
(24) State Credibility ²							8.7%
(25) CW Weighted Inc. Loss & LAE Ratio							72.5%
(26) Cred. Wtd. Inc. Loss & LAE Ratio	[(24) * (21)] + {[1-(24)] * (25)}						69.6%
(27) Rate Level indication	[(26)+(22)] / [1-(23)] - 1						8.8%

¹ Assumed New Business Effective Date:

2/1/2020

\$20,000,000

² Credibility based on formula: P/P+K, where P = 5 year earned premium and K =

No-Fault Coverages

Evaluation Date 7/31/2019							
State DC		Acc. Year 2014	Acc. Year 2015	Acc. Year 2016	Acc. Year 2017	Acc. Year 2018	5 Year Total
(1) Collected Earned Premiums		\$3,728	\$4,531	\$5,547	\$6,142	\$5,308	\$25,256
(2) On-Level Factor		1.048	1.048	1.048	1.048	1.048	
(3) Premium at Current Rate Level	(1) * (2)	\$3,907	\$4,748	\$5,813	\$6,437	\$5,563	\$26,468
(4) Premium Trend		0.000	0.000	0.000	0.000	0.000	
(5) Trend Period ¹		6.592	5.592	4.592	3.592	2.592	
(6) Trend Factor	[1 + (4)] ^ (5)	1.000	1.000	1.000	1.000	1.000	
(7) Trended On-Level Premium	(3) * (6)	\$3,907	\$4,748	\$5,813	\$6,437	\$5,563	\$26,468
(8) Limited Incurred Losses (ex Cats)		\$2,960	\$12,701	\$1,871	\$1,538	\$0	\$19,070
(9) Loss Development Factor		0.999	0.993	0.984	0.990	1.013	
(10) Limited Ultimate Losses (ex Cats)	(8) * (9)	\$2,957	\$12,612	\$1,841	\$1,523	\$0	\$18,933
(11) Loss Trend		0.000	0.000	0.000	0.000	0.000	
(12) Trend Period ¹		6.592	5.592	4.592	3.592	2.592	
(13) Trend Factor	[1 + (11)] ^ (12)	1.000	1.000	1.000	1.000	1.000	
(14) Trended Limited Ultimate Incurred Losses	(13) * (14)	\$2,957	\$12,612	\$1,841	\$1,523	\$0	\$18,933
(15) LAE Load (% of Premium)		0.107	0.107	0.107	0.107	0.107	
(16) Excess Loss Factor (% of Premium)		0.000	0.000	0.000	0.000	0.000	
(17) Excess Wind & Water Load (% of Loss)		0.000	0.000	0.000	0.000	0.000	
(18) Adjusted Incurred Losses & LAE	{[(7)*(15)]+[(7)*(16)]+(14)}+[(14)*(17)]	\$3,375	\$13,120	\$2,463	\$2,212	\$595	\$21,765
(19) Adj. Incurred Loss & LAE Ratio	(18) / (7)	86.4%	276.3%	42.4%	34.4%	10.7%	
(20) Accident Year Weights		10.0%	15.0%	20.0%	25.0%	30.0%	100.0%
(21) Weighted Inc. Loss & LAE Ratio							70.4%
(22) Fixed Expenses:							10.4%
(23) Variable Expenses & Profit & Contingency:							26.5%
(24) State Credibility ²							0.1%
(25) CW Weighted Inc. Loss & LAE Ratio							68.7%
(26) Cred. Wtd. Inc. Loss & LAE Ratio	[(24) * (21)] + {[1-(24)] * (25)}						69.2%
(27) Rate Level indication	[(26)+(22)] / [1-(23)] - 1						8.3%

¹ Assumed New Business Effective Date:

\$20,000,000

^{2/1/2020}

 $^{^{2}}$ Credibility based on formula: P/P+K, where P = 5 year earned premium and K =

Physical Damage Coverages

Evaluation Date 7/31/2019	9						
State DC		Acc. Year 2014	Acc. Year 2015	Acc. Year 2016	Acc. Year 2017	Acc. Year 2018	5 Year Total
(1) Collected Earned Premiums		\$42,453	\$59,106	\$92,810	\$101,351	\$88,861	\$384,581
(2) On-Level Factor		1.231	1.231	1.231	1.231	1.183	\$30 1 ,301
(3) Premium at Current Rate Level	(1) * (2)	\$52,260	\$72,759	\$114,249	\$124,763	\$105,123	\$469,154
(4) Premium Trend		0.013	0.013	0.013	0.013	0.013	Ţ 105/25 I
(5) Trend Period ¹		6.592	5.592	4.592	3.592	2.592	
(6) Trend Factor	$[1 + (4)] ^ (5)$	1.089	1.075	1.061	1.047	1.034	
(7) Trended On-Level Premium	(3) * (6)	\$56,911	\$78,216	\$121,218	\$130,627	\$108,697	\$495,669
(8) Limited Incurred Losses (ex Cats)		\$11,289	\$35,848	\$54,047	\$108,354	\$49,222	\$258,760
(9) Loss Development Factor		1.000	1.000	1.000	0.998	0.995	
(10) Limited Ultimate Losses (ex Cats)	(8) * (9)	\$11,289	\$35,848	\$54,047	\$108,137	\$48,976	\$258,297
(11) Loss Trend		0.052	0.052	0.052	0.052	0.052	
(12) Trend Period ¹		6.592	5.592	4.592	3.592	2.592	
(13) Trend Factor	[1 + (11)] ^ (12)	1.397	1.328	1.262	1.200	1.140	
(14) Trended Limited Ultimate Incurred Losses	(13) * (14)	\$15,771	\$47,606	\$68,207	\$129,764	\$55,833	\$317,181
(15) LAE Load (% of Premium)		0.118	0.118	0.118	0.118	0.118	
(16) Excess Loss Factor (% of Premium)		0.000	0.000	0.000	0.000	0.000	
(17) Excess Wind & Water Load (% of Loss)		0.008	0.008	0.008	0.008	0.008	
(18) Adjusted Incurred Losses & LAE	{[(7)*(15)]+[(7)*(16)]+(14)}+[(14)*(17)]	\$22,613	\$57,216	\$83,056	\$146,216	\$69,106	\$378,207
(19) Adj. Incurred Loss & LAE Ratio	(18) / (7)	39.7%	73.2%	68.5%	111.9%	63.6%	
 (20) Accident Year Weights (21) Weighted Inc. Loss & LAE Ratio (22) Fixed Expenses: (23) Variable Expenses & Profit & Contingency: (24) State Credibility ² 	(// (-//	10.0%	15.0%	20.0%	25.0%	30.0%	100.0% 75.7% 10.7% 27.7% 16.1%
(25) CW Weighted Inc. Loss & LAE Ratio (26) Cred. Wtd. Inc. Loss & LAE Ratio	[(24) * (21)] + {[1-(24)] * (25)}						71.4% 72.1%
(27) Rate Level indication	[(26)+(22)] / [1-(23)] - 1						14.5%

¹ Assumed New Business Effective Date: 2/1/20

\$2,000,000

² Credibility based on formula: P/P+K, where P = 5 year earned premium and K =

Combined Coverages

District of Columbia Avenues Commercial Auto Combined Indication

Proposed Effective Date: 3/1/2020

	Indication	Weight
Liability	8.8%	79.6%
No-Fault (P.I.P.)	8.3%	1.1%
Physical Damage	14.5%	19.3%
Combined	9.9%	

Expected Loss Ratio

Commercial Automobile - Liability and No-Fault

	Total	Fixed	Variable	
Expense Category	Expense	Expense	Expense	Source
(1) Commission and Brokerage	16.0%	0.0%	16.0%	District of Columbia-specific expense from Page 14
(2) General Expense	11.3%	8.5%	2.8%	Countrywide IEE for Commercial Auto
(3) Other Acquisition	5.7%	1.9%	3.8%	Countrywide IEE for Commercial Auto
(4) Taxes, Licenses, and Fees	2.1%	0.0%	2.1%	District of Columbia-specific expense from Page 14
(5) Profit & Contingencies	1.8%	0.0%	1.8%	District of Columbia IRR Model for Comm Auto Liability
(6) Total Expenses & Profit	36.9%	10.4%	26.5%	(1) + (2) + (3) + (4) + (5)
(7) Permissible Loss & LAE Ratio	63.1%			1- (6)

Expected Loss RatioCommercial Automobile - Physical Damage

	Total	Fixed	Variable	
Expense Category	Expense	Expense	Expense	Source
(1) Commission and Brokerage	16.2%	0.0%	16.2%	District of Columbia-specific expense from Page 14
(2) General Expense	11.7%	8.8%	2.9%	Countrywide IEE for Commercial Auto
(3) Other Acquisition	5.7%	1.9%	3.8%	Countrywide IEE for Commercial Auto
(4) Taxes, Licenses, and Fees	2.1%	0.0%	2.1%	District of Columbia-specific expense from Page 14
(5) Profit & Contingencies	2.7%	0.0%	2.7%	District of Columbia IRR Model for Comm Auto Physical Damage
(6) Total Expenses & Profit	38.4%	10.7%	27.7%	(1) + (2) + (3) + (4) + (5)
(7) Permissible Loss & LAE Ratio	61.6%			1- (6)

Includes data for all companies in the state

Trend values from ISO Loss Cost Filing Designation

CA-2018-BRLA1

Commercial Auto Liability and No-Fault Loss Trend

			i e	
District of Columbia Trend	ISO	weight*	weighted trend	
\$100k CSL Bodily Injury	-1.40%			
Property Damage	7.10%			
Credibility-Weighted DC Trend				
\$100k CSL Bodily Injury	3.80%	72.8%	2.8%	(1)
Property Damage	4.90%	27.2%	1.3%	(2)
No-Fault (P.I.P.) Trend				
Trucks, Tractors, and Trailers	0.00%	62.9%	0.0%	(3)
Private Passenger Types	0.00%	36.9%	0.0%	(4)
Garages	0.00%	0.3%	0.0%	(5)

4.1%	Selected Liability Loss Trend [(1) + (2)]
0.0%	Selected P.I.P. Loss Trend [(3) + (4) + (5)]

Commercial Auto Physical Damage Loss Trend

Trucks, Tractors, and Trailers	ISO	weight*	TTT / PPT weight*	weighted trend
(OTC) Comprehensive	7.00%	25.7%	63.2%	1.1% (6)
Collision	5.00%	74.3%	03.270	2.3% (7)
Private Passenger Types and Garages				
(OTC) Comprehensive	6.50%	25.7%	36.8%	0.6% (8)
Collision	4.50%	74.3%	30.670	1.2% (9)

5.2% Selected Loss Trend [(6) + (7) + (8) + (9)]

Commercial Auto Physical Damage Premium (OCN) Trend

Trucks, Tractors, and Trailers	ISO	weight*	TTT / PPT weight*	weighted trend	_
(OTC) Comprehensive	1.00%	25.7%	63.2%	0.2%	(10)
Collision	1.60%	74.3%	05.270	0.8%	(11)
Private Passenger Types and Garages					
(OTC) Comprehensive	1.10%	25.7%	36.8%	0.1%	(12)
Collision	0.60%	74.3%	30.670	0.2%	(13)

1.3% Selected Premium (OCN) Trend [(10) + (11) + (12) + (13)]

^{*} Weights are based upon AY 2015 - 2017 Hanover Insurance Group Countrywide Incurred Loss distributions

Loss Development - Liability Direct Incurred Losses (\$000)

Limited to \$2	50,000															
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
2004	9,719	14,289	16,253	17,095	17,513	17,674	17,658	17,854	17,854	17,854	17,854	17,854	17,854	17,854	17,854	-
2005	11,210	16,944	18,779	20,633	20,787	20,426	20,431	20,433	20,420	20,452	20,451	20,451	20,451	20,486	-	-
2006	10,747	15,284	17,371	19,623	19,674	19,845	19,896	19,866	19,881	19,881	19,881	19,881	19,846	-	-	-
2007	10,922	15,824	18,722	19,743	20,238	20,171	20,205	20,125	20,125	20,125	20,123	20,123	-	-	-	-
2008	10,028	17,590	20,253	21,484	22,716	22,710	22,726	22,821	22,822	22,857	22,857	-	-	-	-	-
2009	12,151	19,174	21,063	22,618	23,869	24,240	24,244	24,116	24,235	24,235	-	-	-	-	-	-
2010	14,217	22,163	27,829	29,515	30,418	30,607	30,726	30,780	30,858	-	-	-	-	-	-	-
2011	12,263	23,507	27,018	29,770	30,426	30,618	30,588	30,599	-	-	-	-	-	-	-	-
2012	17,353	28,642	33,207	35,769	37,346	37,849	38,093	-	-	-	-	-	-	-	-	-
2013	15,208	28,200	32,948	36,862	37,213	37,676	-	-	-	-	-	-	-	-	-	-
2014	13,292	25,036	30,291	31,906	32,401	-	-	-	-	-	-	-	-	-	-	-
2015	15,107	27,388	30,232	31,798	-	-	-	-	-	-	-	-	-	-	-	-
2016	12,543	19,769	24,374	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	9,571	18,885	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2018	9,510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
							D	evelopment Facto	ors							
Period	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - Ult
2004	1.470	1.137	1.052	1.024	1.009	0.999	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2005	1.511	1.108	1.099	1.007	0.983	1.000	1.000	0.999	1.002	1.000	1.000	1.000	1.002			
2006	1.422	1.137	1.130	1.003	1.009	1.003	0.999	1.001	1.000	1.000	1.000	0.998				
2007	1.449	1.183	1.055	1.025	0.997	1.002	0.996	1.000	1.000	1.000	1.000					
2008	1.754	1.151	1.061	1.057	1.000	1.001	1.004	1.000	1.002	1.000						
2009	1.578	1.099	1.074	1.055	1.016	1.000	0.995	1.005	1.000							
2010	1.559	1.256	1.061	1.031	1.006	1.004	1.002	1.003								
2011	1.917	1.149	1.102	1.022	1.006	0.999	1.000									
2012	1.651	1.159	1.077	1.044	1.013	1.006										
2013	1.854	1.168	1.119	1.010	1.012											
2014	1.884	1.210	1.053	1.016												
2015	1.813	1.104	1.052													
2016	1.576	1.233														
2017	1.973															
2018																
							De	velopment Avera	iges							
5 Yr X H/L	1.850	1.179	1.077	1.023	1.010	1.002	0.999	1.001	1.001	1.000	1.000	•	•	•	•	
3 Yr Avg	1.787	1.182	1.075	1.023	1.010	1.003	0.999	1.003	1.001	1.000	1.000	1.000	1.000			
Selected	1.787	1.182	1.075	1.023	1.010	1.003	0.999	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	
/r X H/L cun	2.435	1.316	1.116	1.036	1.013	1.003	1.001	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr cum.	2.359	1.320	1.117	1.039	1.016	1.006	1.003	1.004	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	2.359	1.320	1.117	1.039	1.016	1.006	1.003	1.004	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Loss Development - Liability Direct Incurred Losses (\$000)

Unlimited																
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
2004	13,839	19,242	22,300	24,091	24,282	24,493	24,432	24,653	24,653	24,828	24,828	24,828	24,828	24,828	24,828	-
2005	16,293	23,680	25,842	28,290	28,398	28,134	28,140	28,217	28,204	28,236	28,235	28,235	28,235	28,270	-	-
2006	14,607	20,762	24,107	26,857	27,816	28,029	28,080	28,050	28,124	28,124	28,124	28,124	28,089	-	-	-
2007	13,734	20,443	25,014	27,411	28,812	28,819	28,878	28,748	28,748	28,747	28,746	28,746	-	-	-	-
2008	11,765	20,692	24,909	27,053	28,880	28,985	29,001	29,096	29,097	29,132	29,234	-	-	-	-	-
2009	13,908	22,453	26,070	29,901	32,839	33,711	33,683	33,655	35,160	35,160	-	-	-	-	-	-
2010	16,766	28,564	36,780	41,966	44,210	44,525	44,712	44,899	44,979	-	-	-	-	-	-	-
2011	13,613	28,776	34,992	40,932	43,088	44,036	44,006	44,183	-	-	-	-	-	-	-	-
2012	23,133	36,477	43,898	49,289	52,340	53,429	54,072	-	-	-	-	-	-	-	-	-
2013	21,234	40,515	48,384	56,093	58,323	60,572	-	-	-	-	-	-	-	-	-	-
2014	16,054	32,451	40,608	45,017	47,039	-	-	-	-	-	-	-	-	-	-	-
2015	16,847	32,583	39,230	43,815	-	-	-	-	-	-	-	-	-	-	-	-
2016	13,765	23,906	32,523	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	11,226	26,486	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2018	10,510	-	-	-	-	-	-	-	-		-	-	-	-	-	-
								evelopment Facto								
Period	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - Ult
2004	1.390	1.159	1.080	1.008	1.009	0.998	1.009	1.000	1.007	1.000	1.000	1.000	1.000	1.000		
2005	1.453	1.091	1.095	1.004	0.991	1.000	1.003	1.000	1.001	1.000	1.000	1.000	1.001			
2006	1.421	1.161	1.114	1.036	1.008	1.002	0.999	1.003	1.000	1.000	1.000	0.999				
2007	1.489	1.224	1.096	1.051	1.000	1.002	0.995	1.000	1.000	1.000	1.000					
2008	1.759	1.204	1.086	1.068	1.004	1.001	1.003	1.000	1.001	1.004						
2009	1.614	1.161	1.147	1.098	1.027	0.999	0.999	1.045	1.000							
2010	1.704	1.288	1.141	1.053	1.007	1.004	1.004	1.002								
2011	2.114	1.216	1.170	1.053	1.022	0.999	1.004									
2012	1.577	1.203	1.123	1.062	1.021	1.012										
2013	1.908	1.194	1.159	1.040	1.039											
2014	2.021	1.251	1.109	1.045												
2015	1.934	1.204	1.117													
2016	1.737	1.360														
2017	2.359															
2018																
								velopment Avera								
5 Yr X H/L	1.954	1.219	1.133	1.050	1.023	1.001	1.002	1.002	1.000	1.000	1.000					
3 Yr Avg	2.010	1.272	1.128	1.049	1.027	1.005	1.002	1.016	1.000	1.001	1.000	1.000	1.000			
Selected	2.010	1.272	1.128	1.049	1.027	1.005	1.002	1.016	1.000	1.001	1.000	1.000	1.000	1.000	1.000	
Yr X H/L cun	2.913	1.491	1.223	1.079	1.028	1.005	1.004	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr cum.	3.184	1.584	1.245	1.104	1.052	1.024	1.019	1.017	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
Selected	3.184	1.584	1.245	1.104	1.052	1.024	1.019	1.017	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000

Loss Development - No Fault Direct Incurred Losses (\$000)

AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
2004	641	512	495	545	541	549	549	549	549	549	549	549	549	549	549	
2005	541	597	584	582	593	590	590	590	590	590	590	590	590	590	-	-
2006	545	548	545	548	562	568	567	569	570	570	570	570	570	-	-	=
2007	665	796	833	830	830	834	832	836	836	836	836	836	-	-	-	-
2008	623	846	871	863	808	808	807	808	808	808	808	-	-	-	-	-
2009	878	1,184	1,102	1,087	1,062	1,067	1,271	1,271	1,271	1,271	-	-	-	-	-	-
2010	1,263	1,639	1,565	1,497	1,457	1,468	1,467	1,463	1,467	-	-	-	-	-	-	-
2011	1,346	1,661	1,734	1,753	1,749	1,761	1,757	1,757	-	-	-	-	-	-	-	-
2012	1,673	1,874	1,888	1,964	1,975	1,917	1,911	-	-	-	-	-	-	-	-	-
2013	2,040	2,253	2,282	2,405	2,324	2,292	-	-	-	-	-	-	-	-	-	-
2014	1,564	1,810	1,893	1,904	1,930	-	-	-	-	-	-	-	-	-	-	-
2015	1,471	1,496	1,348	1,351	-	-	-	-	-	=	=	=	-	-	-	-
2016	1,308	1,349	1,533	-	-	-	-	=	-	-	-	-	-	-	-	-
2017	1,228	1,551	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2018	1,288	=	=	-	-	-	=	-	-	-	-	-	-	-	-	
								evelopment Fac								
Period	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - Ult
2004	0.798	0.968	1.101	0.994	1.014	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2005 2006	1.105 1.004	0.977 0.995	0.998 1.007	1.018 1.024	0.994 1.011	1.000 0.998	1.000 1.005	1.000 1.001	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000			
2006	1.198		0.997	0.999	1.006	0.998	1.005	1.001	1.000	1.000	1.000	1.000				
2007	1.358	1.046 1.029	0.997	0.937	1.000	0.997	1.005	1.000	1.000	1.000	1.000					
2008	1.338	0.931	0.987	0.937	1.005	1.191	1.001	1.000	1.000	1.000						
2009	1.298	0.955	0.957	0.977	1.003	1.000	0.997	1.003	1.000							
2010	1.233	1.044	1.011	0.973	1.007	0.998	1.000	1.003								
2011	1.120	1.008	1.040	1.005	0.971	0.997	1.000									
2012	1.104	1.013	1.054	0.966	0.987	0.777										
2014	1.157	1.046	1.006	1.014	5.767											
2015	1.017	0.902	1.002	1.014												
2016	1.032	1.136	1.002													
2017	1.264	1.100														
2018																
							De	velopment Aver	ages							
5 Yr X H/L	1.098	1.022	1.019	0.992	1.000	0.999	1.000	1.001	1.000	1.000	1.000					
3 Yr Avg	1.104	1.028	1.021	0.995	0.988	0.998	0.999	1.001	1.000	1.000	1.000	1.000	1.000			
Selected	1.104	1.028	1.021	0.995	0.988	0.998	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
r X H/L cun	1.134	1.033	1.011	0.992	1.000	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr cum.	1.137	1.030	1.002	0.981	0.986	0.998	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.137	1.030	1.002	0.981	0.986	0.998	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Loss Development - No Fault Direct Incurred Losses (\$000)

Unlimited																
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
2004	641	512	495	545	541	549	549	549	549	549	549	549	549	549	549	-
2005	541	597	584	582	593	590	590	590	590	590	590	590	590	590	-	-
2006	545	548	545	548	562	568	567	569	570	570	570	570	570	-	-	-
2007	665	796	833	830	830	834	832	836	836	836	836	836	-	-	-	-
2008	623	846	871	863	808	808	807	808	808	808	808	-	-	-	-	-
2009	878	1,184	1,102	1,087	1,062	1,067	1,324	1,324	1,324	1,324	-	-	-	-	-	-
2010	1,263	1,639	1,565	1,497	1,457	1,468	1,467	1,463	1,467	-	=	-	-	-	-	=
2011	1,346	1,661	1,734	1,753	1,749	1,761	1,757	1,757	-	-	-	-	-	-	-	-
2012	1,673	1,874	1,888	1,964	1,975	1,917	1,911	-	-	-	-	-	-	-	-	-
2013	2,040	2,253	2,282	2,405	2,324	2,292	-	-	-	-	-	-	-	-	-	-
2014	1,594	1,818	1,901	1,914	1,940	-	-	-	-	-	-	-	-	-	-	-
2015	1,471	1,496	1,348	1,351	-	-	=	-	-	-	-	-	-	-	-	-
2016	1,308	1,349	1,533	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	1,484	1,768	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2018	1,288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
								evelopment Fac								
Period	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - Ult
2004	0.798	0.968	1.101	0.994	1.014	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2005	1.105	0.977	0.998	1.018	0.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2006	1.004	0.995	1.007	1.024	1.011	0.998	1.005	1.001	1.000	1.000	1.000	1.000				
2007	1.198	1.046	0.997	0.999	1.006	0.997	1.005	1.001	1.000	1.000	1.000					
2008	1.358	1.029	0.991	0.937	1.000	0.999	1.001	1.000	1.000	1.000						
2009	1.348	0.931	0.987	0.977	1.005	1.240	1.000	1.000	1.000							
2010	1.298	0.955	0.957	0.973	1.007	1.000	0.997	1.003								
2011	1.233	1.044	1.011	0.998	1.007	0.998	1.000									
2012	1.120	1.008	1.040	1.005	0.971 0.987	0.997										
2013 2014	1.104	1.013	1.054 1.007	0.966	0.987											
2014	1.140 1.017	1.046 0.902	1.007	1.014												
2016	1.017	1.136	1.002													
2016	1.032	1.130														
2017	1.172															
2010							De	velopment Aver	anes							
5 Yr X H/L	1.092	1.022	1.019	0.992	1.000	0.999	1.000	1.001	1.000	1.000	1.000					
3 Yr Avg	1.092	1.028	1.021	0.995	0.988	0.998	0.999	1.001	1.000	1.000	1.000	1.000	1.000			
Selected	1.080	1.028	1.021	0.995	0.988	0.998	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Yr X H/L cun	1.128	1.033	1.011	0.992	1.000	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr cum.	1.112	1.030	1.002	0.981	0.986	0.998	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.112	1.030	1.002	0.981	0.986	0.998	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Sciected	1.112	1.030	1.002	0.701	0.700	0.770	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Loss Development - Physical Damage Direct Incurred Losses (\$000)

Limited to \$2 AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
2004	20,006	21,106	21,063	21,032	21,028	21,018	21,024	21,021	21,018	21,015	21,014	21,011	21,011	21,011	21,011	172
2005	20,993	22,217	22,188	22,193	22,178	22,172	22,164	22,166	22,161	22,160	22,160	22,160	22,160	22,160	21,011	_
2006	20,531	21,088	20,929	20,931	20,909	20,897	20,894	20,893	20,892	20,890	20,888	20,888	20,886	-	_	_
2007	23,264	23,883	23,589	23,580	23,565	23,569	23,567	23,568	23,567	23,567	23,566	23,565	20,000	_	_	_
2008	24,369	25,846	25,684	25,661	25,648	25,646	25,646	25,649	25,648	25,648	25,648	,	_	_	_	_
2009	22,339	22,860	22,731	22,684	22,685	22,672	22,671	22,666	22,666	22,666		_	_	_	_	_
2010	24,367	25,219	25,065	25,022	24,988	24,980	24,979	24,979	24,979	,	-	-	-	-	-	_
2011	33,341	33,901	33,758	33,718	33,729	33,723	33,721	33,721	-	-	-	-	-	-	-	-
2012	35,686	36,670	36,429	36,360	36,318	36,306	36,306	-	-	-	-	-	=	-	-	=
2013	40,122	41,770	41,601	41,560	41,547	41,554		=	-	-	-	-	=	-	-	=
2014	44,791	44,595	44,254	44,159	44,128	-	-	-	-	-	-	-	-	-	-	-
2015	43,920	43,731	43,447	43,370	-	-	-	-	-	-	-	-	-	-	-	-
2016	42,847	43,115	42,879	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	44,771	45,415	-	-	=	-	-	-	-	=-	-	=-	-	=	-	=
2018	47,601	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
								evelopment Fac								
Period	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - Ult
2004	1.055	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2005	1.058	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2006	1.027	0.992	1.000	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2007	1.027	0.988	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2008	1.061	0.994	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000						
2009	1.023	0.994	0.998	1.000	0.999	1.000	1.000	1.000	1.000							
2010	1.035	0.994	0.998	0.999	1.000	1.000	1.000	1.000								
2011	1.017	0.996	0.999	1.000	1.000	1.000	1.000									
2012	1.028	0.993	0.998	0.999	1.000	1.000										
2013	1.041	0.996	0.999	1.000	1.000											
2014	0.996	0.992	0.998	0.999												
2015	0.996	0.994	0.998													
2016	1.006	0.995														
2017	1.014															
2018							Do	velopment Aver	2000							
5 Yr X H/L	1.005	0.994	0.998	0.999	1.000	1 000		1.000	1.000	1 000	1.000					
3 Yr Avg	1.005	0.994	0.998	0.999	1.000	1.000 1.000	1.000 1.000	1.000	1.000	1.000 1.000	1.000 1.000	1.000	1.000			
Selected	1.005	0.994	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
																1.000
r X H/L cun 3 Yr cum.	0.996 0.996	0.991 0.991	0.997 0.997	0.999 0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000 1.000	1.000	1.000	1.000
	0.996	0.991	0.997	0.999	1.000 1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		1.000	1.000	1.000
Selected	U.996	0.991	0.997	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Loss Development - Physical Damage Direct Incurred Losses (\$000)

Unlimited																
AY	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
2004	20,006	21,106	21,063	21,032	21,028	21,018	21,024	21,021	21,018	21,015	21,014	21,011	21,011	21,011	-	-
2005	20,993	22,217	22,188	22,193	22,178	22,172	22,164	22,166	22,161	22,160	22,160	22,160	22,160	22,160	-	-
2006	21,081	21,245	20,957	20,959	20,937	20,925	20,922	20,921	20,920	20,918	20,916	20,916	20,914	-	-	-
2007	23,264	23,883	23,589	23,580	23,565	23,569	23,567	23,568	23,567	23,567	23,566	23,565	-	-	-	-
2008	24,369	25,846	25,684	25,661	25,648	25,646	25,646	25,649	25,648	25,648	25,648	-	-	-	-	-
2009	22,339	22,860	22,731	22,684	22,685	22,672	22,671	22,666	22,666	22,666	-	-	-	-	-	-
2010	24,367	25,219	25,065	25,022	24,988	24,980	24,979	24,979	24,979	-	-	-	-	-	-	-
2011	33,841	34,629	34,487	34,447	34,458	34,451	34,450	34,450	-	=-	-	-	-	-	-	-
2012	35,686	36,670	36,429	36,360	36,318	36,306	36,306	-	-	-	-	-	-	-	-	-
2013	40,122	41,770	41,601	41,560	41,547	41,554	-	-	-	-	-	-	-	-	-	-
2014	44,791	44,595	44,254	44,159	44,128	-	-	-	-	-	-	-	-	-	-	-
2015	43,920	43,731	43,447	43,370	-	-	-	-	-	-	-	-	-	-	-	-
2016	42,847	43,115	42,879	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	44,771	45,415	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2018	47,601	· -	-	-	-	-	-	=	-	-	-	-	=	=	-	=
							D	evelopment Fac	tors							
Period	12 - 24	24 - 36	36 - 48	48 - 60	60 - 72	72 - 84	84 - 96	96 - 108	108 - 120	120 - 132	132 - 144	144 - 156	156 - 168	168 - 180	180 - 192	192 - Ult
2004	1.055	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000		
2005	1.058	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2006	1.008	0.986	1.000	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2007	1.027	0.988	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2008	1.061	0.994	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000						
2009	1.023	0.994	0.998	1.000	0.999	1.000	1.000	1.000	1.000							
2010	1.035	0.994	0.998	0.999	1.000	1.000	1.000	1.000								
2011	1.023	0.996	0.999	1.000	1.000	1.000	1.000									
2012	1.028	0.993	0.998	0.999	1.000	1.000										
2013	1.041	0.996	0.999	1.000	1.000											
2014	0.996	0.992	0.998	0.999												
2015	0.996	0.994	0.998													
2016	1.006	0.995														
2017	1.014															
2018																
							De	velopment Aver	ages							
5 Yr X H/L	1.005	0.994	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000		*	•		
3 Yr Avg	1.005	0.994	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
Selected	1.005	0.994	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Yr X H/L cun	0.996	0.991	0.997	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3 Yr cum.	0.996	0.991	0.997	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	0.996	0.991	0.997	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Liability Excess Loss Load based on District of Columbia Data

(1) Calendar/	(2) Direct	(3) Unlimited	(4) Limited	(5) Liability	(6) Liability	(7) Ultimate	(8) Ultimate	(9) Ultimate	(10) Ultimate
Accident	Earned	Incurred	Incurred	Unlimited	Limited	Unlimited	Limited	Losses	Excess
Year	Premium	Losses	Losses	LDF	LDF	Losses	Losses	XS of \$250k	Loss Load
2013	\$0	\$0	\$0	1.021	1.004	\$0	\$0	\$0	#DIV/0!
2014	\$1,071,035	\$167,734	\$167,734	1.035	1.010	\$173,605	\$169,411	\$4,194	0.4%
2015	\$1,203,039	\$525,097	\$469,774	1.073	1.026	\$563,429	\$481,988	\$81,441	6.8%
2016	\$1,351,947	\$239,187	\$239,187	1.159	1.071	\$277,218	\$256,169	\$21,049	1.6%
2017	\$1,458,132	\$188,114	\$188,114	1.367	1.193	\$257,152	\$224,420	\$32,732	2.2%

3 Year Average	3.4%
5 Year Average	2.7%
Selected Excess Ratio (% of Premium)	3.4%

No-Fault Excess Loss Load based on District of Columbia Data

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Calendar/	Direct	Unlimited	Limited	No-Fault	No-Fault	Ultimate	Ultimate	Ultimate	Ultimate
Accident	Earned	Incurred	Incurred	Unlimited	Limited	Unlimited	Limited	Losses	Excess
Year	Premium	Losses	Losses	LDF	LDF	Losses	Losses	XS of \$250k	Loss Load
2013	\$0	\$0	\$0	0.999	0.999	\$0	\$0	\$0	#DIV/0!
2014	\$19,100	\$10,045	\$10,045	0.993	0.993	\$9,974	\$9,974	\$0	0.0%
2015	\$23,763	\$12,701	\$12,701	0.984	0.984	\$12,498	\$12,498	\$0	0.0%
2016	\$28,152	\$1,871	\$1,871	0.990	0.990	\$1,852	\$1,852	\$0	0.0%
2017	\$33,408	\$5,929	\$5,929	1.013	1.013	\$6,006	\$6,006	\$0	0.0%

3 Year Average	0.0%
5 Year Average	0.0%
Selected Excess Ratio (% of Premium)	0.0%

Physical Damage Excess Loss Load based on District of Columbia Data

(1) Calendar/ Accident Year	(2) Direct Earned Premium	(3) Unlimited Incurred Losses	(4) Limited Incurred Losses	(5) Phys Dam Unlimited LDF	(6) Phys Dam Limited LDF	(7) Ultimate Unlimited Losses	(8) Ultimate Limited Losses	(9) Ultimate Losses XS of \$250k	(10) Ultimate Excess Loss Load
2013	\$0	\$0	\$0	1.000	1.000	\$0	\$0	\$0	#DIV/0!
2014	\$449,212	\$201,333	\$201,333	1.000	1.000	\$201,333	\$201,333	\$0	0.0%
2015	\$507,978	\$224,641	\$224,641	1.000	1.000	\$224,641	\$224,641	\$0	0.0%
2016	\$563,518	\$260,216	\$260,216	0.998	0.998	\$259,695	\$259,695	\$0	0.0%
2017	\$633,064	\$331,746	\$331,746	0.995	0.995	\$330,087	\$330,087	\$0	0.0%

3 Year Average	0.0%
5 Year Average	0.0%
Selected Excess Ratio (% of Premium)	0.0%

⁽²⁾ to (4): Based on both Avenues and Non-Avenues loss data in the state

⁽⁵⁾ and (6): Based on state's historical loss triangles for Avenues and Non-Avenues

 $^{(7) = (3) \}times (5)$

 $^{(8) = (4) \}times (6)$ (9) = (7) - (8)

^{(10) = (9) / (2)}

Liability Excess Loss Ratio based on Countrywide Data

(1) Calendar/	(2) Direct	(3) Unlimited	(4) Limited	(5) Liability	(6) Liability	(7) Ultimate	(8) Ultimate	(9) Ultimate	(10) Ultimate
Accident	Earned	Reported	Reported	Unlimited	Limited	Unlimited	Limited	Losses	Excess
Year	Premium	Losses	Losses	LDF	LDF	Losses	Losses	XS of \$250k	Loss Ratio
2014	\$216,913,904	\$129,706,827	\$95,304,751	1.013	1.004	\$131,393,015	\$95,685,970	\$35,707,045	16.5%
2015	\$216,052,754	\$124,437,580	\$96,588,695	1.024	1.009	\$127,424,082	\$97,457,993	\$29,966,089	13.9%
2016	\$215,819,066	\$129,409,090	\$97,461,546	1.050	1.019	\$135,879,544	\$99,313,315	\$36,566,229	16.9%
2017	\$219,797,692	\$119,194,799	\$91,431,619	1.116	1.053	\$133,021,396	\$96,277,495	\$36,743,901	16.7%
2018	\$232,039,121	\$79,266,515	\$69,651,272	1.280	1.158	\$101,461,139	\$80,656,173	\$20,804,966	9.0%

3 Year Average 14.1%
5 Year Average 14.5%
Selected Excess Ratio (% of Premium) 14.5%

Physical Damage Excess Loss Ratio based on Countrywide Data

(1) Calendar/	(2) Direct	(3) Unlimited	(4) Limited	(5) Phys Dam	(6) Phys Dam	(7) Ultimate	(8) Ultimate	(9) Ultimate	(10) Ultimate
Accident	Earned	Reported	Reported	Unlimited	Limited	Unlimited	Limited	Losses	Excess
Year	Premium	Losses	Losses	LDF	LDF	Losses	Losses	XS of \$250k	Loss Ratio
2014	\$70,657,831	\$44,126,938	\$44,126,938	1.000	1.000	\$44,126,938	\$44,126,938	\$0	0.0%
2015	\$72,424,993	\$43,370,594	\$43,370,594	1.000	1.000	\$43,370,594	\$43,370,594	\$0	0.0%
2016	\$73,422,166	\$42,805,064	\$42,805,064	1.000	1.000	\$42,805,064	\$42,805,064	\$0	0.0%
2017	\$77,401,302	\$45,195,173	\$45,195,173	0.998	0.998	\$45,104,782	\$45,104,782	\$0	0.0%
2018	\$83,956,715	\$48,921,887	\$48,921,887	0.995	0.995	\$48,677,278	\$48,677,278	\$0	0.0%

3 Year Average 0.0%
5 Year Average 0.0%
Selected Excess Ratio (% of Premium) 0.0%

No-Fault Excess Loss Ratio based on Countrywide excluding Michigan Data

(1) Calendar/ Accident	(2) Direct Earned	(3) Unlimited Reported	(4) Limited Reported	(5) No-Fault Unlimited	(6) No-Fault Limited	(7) Ultimate Unlimited	(8) Ultimate Limited	(9) Ultimate Losses	(10) Ultimate Excess
Year	Premium	Losses	Losses	LDF	LDF	Losses	Losses	XS of \$100k	Loss Ratio
2014	\$205,804,641	\$122,280,946	\$90,289,926	0.999	0.999	\$122,158,665	\$90,199,636	\$31,959,029	15.5%
2015	\$206,523,503	\$116,993,778	\$92,492,994	0.993	0.993	\$116,174,822	\$91,845,543	\$24,329,279	11.8%
2016	\$207,501,140	\$125,635,928	\$94,533,385	0.984	0.984	\$123,625,754	\$93,020,850	\$30,604,904	14.7%
2017	\$212,428,402	\$113,830,663	\$88,669,734	0.990	0.990	\$112,692,356	\$87,783,037	\$24,909,319	11.7%
2018	\$224,577,181	\$77,908,322	\$68,418,079	1.013	1.013	\$78,921,130	\$69,307,514	\$9,613,616	4.3%

3 Year Average 10.1%
5 Year Average 11.5%
Selected Excess Ratio (% of Premium) 11.5%

(2) to (4): Based on an internal Hanover Insurance Group data query for Commercial Auto, based upon policy line of business.

(5) and (6): Based on countrywide historical loss triangles. For No-Fault, based on countrywide excluding Michigan historical loss triangles.

 $(7) = (3) \times (5)$

 $(8) = (4) \times (6)$

(9) = (7) - (8)

(10) = (9) / (2)

ISO Excess Wind & Water

Commercial Automobile - Comprehensive (OTC)
ISO Loss Cost Filing Designation: CA-2019-BRLA1
All Vehicle Types Combined

	(1)	(2)	(3) = (2) - (1)	(4) = (1) / (3)	(5) Capped	(6) = (5) - Avg(5) Capped	(7) = (4) - (5) Excess	(8) = [(6)+(7)]*(3) Total
	OTC	OTC	Total		Wind/Water	Excess	Wind/Water	Excess
Accident	Wind & Water	Total	Non Wind/Water	Ratio	Ratio	Wind/Water	Ratio	Wind/Water
Year	Losses	Losses	Losses	Wind/Water	(< 5*Median)	Ratio	Above Cap	Losses
1988	\$1,349	\$213,112	\$211,763	0.006	0.006	0.000	0.000	\$0
1989	\$18,315	\$470,287	\$451,972	0.041	0.041	0.000	0.000	\$0
1990	\$18,807	\$369,442	\$350,635	0.054	0.054	0.000	0.000	\$0
1991	\$723	\$304,774	\$304,051	0.002	0.002	0.000	0.000	\$0
1992	\$17,142	\$207,396	\$190,254	0.090	0.090	0.004	0.000	\$761
1993	\$14,056	\$225,267	\$211,211	0.067	0.067	0.000	0.000	\$0
1994	\$13,576	\$307,321	\$293,745	0.046	0.046	0.000	0.000	\$0
1995	\$8,543	\$187,526	\$178,983	0.048	0.048	0.000	0.000	\$0
1996	\$2,915	\$425,281	\$422,366	0.007	0.007	0.000	0.000	\$0
1997	\$4,851	\$246,577	\$241,726	0.020	0.020	0.000	0.000	\$0
1998	\$0	\$224,765	\$224,765	0.000	0.000	0.000	0.000	\$0
1999	\$5,484	\$120,605	\$115,121	0.048	0.048	0.000	0.000	\$0
2000	\$18,672	\$347,873	\$329,201	0.057	0.057	0.000	0.000	\$0
2001	\$2,753	\$213,367	\$210,614	0.013	0.013	0.000	0.000	\$0
2002	\$31,470	\$248,181	\$216,711	0.145	0.145	0.059	0.000	\$12,786
2003	\$5,051	\$294,248	\$289,197	0.017	0.017	0.000	0.000	\$0
2004	\$115,956	\$266,062	\$150,106	0.772	0.295	0.209	0.477	\$102,973
2005	\$11,306	\$171,161	\$159,855	0.071	0.071	0.000	0.000	\$0
2006	\$6,867	\$87,121	\$80,254	0.086	0.086	0.000	0.000	\$0
2007	\$25,782	\$91,895	\$66,113	0.390	0.295	0.209	0.095	\$20,098
2008	\$964	\$83,722	\$82,758	0.012	0.012	0.000	0.000	\$0
2009	\$22,712	\$145,006	\$122,294	0.186	0.186	0.100	0.000	\$12,229
2010	\$12,906	\$116,216	\$103,310	0.125	0.125	0.039	0.000	\$4,029
2011	\$21,401	\$233,376	\$211,975	0.101	0.101	0.015	0.000	\$3,180
2012	\$35,061	\$158,730	\$123,669	0.284	0.284	0.198	0.000	\$24,486
2013	\$14,520	\$103,401	\$88,881	0.163	0.163	0.077	0.000	\$6,844
2014	\$0	\$74,621	\$74,621	0.000	0.000	0.000	0.000	\$0
2015	\$6,300	\$109,419	\$103,119	0.061	0.061	0.000	0.000	\$0
2016	\$15,783	\$254,495	\$238,712	0.066	0.066	0.000	0.000	\$0
2017	\$23,660	\$159,078	\$135,418	0.175	0.175	0.089	0.000	\$12,052

Averages 0.086 0.033 0.019

Median 0.059 Median * 5 0.295

- (9) Excess Wind & Water Factor = 1.049 1.0 + [(Avg(6) + Avg(7)) / (1.0 + Avg(5) - Avg(6))]
- (10) Normal Wind & Water Factor = 0.043 [(Sum(1) Sum(8))/sum(2)]

(11) DC Hanover Insurance Group Collision Losses: \$1,168,975 Based on AYs 2015 - 2017

(12) DC Hanover Insurance Group OTC Losses: \$226,671

Based on AYs 2015 - 2017

(13) % Comprehensive (OTC): 16.2% (12)/[(11)+(12)]

(14) Final Physical Damage Excess Wind/Water Factor: [(9) - 1]*(13)

0.8%

Final Comprehensive (OTC) Factors							
(9) - 1	(10)	avg (5)					
	Normal	Capped					
Excess	Excess	Wind/Water					
Wind/Water	Wind/Water	Ratio					
4.9%	4.3%	8.6%					

Inforce Actual Written Premium by Coverage used in Calculation of Rate Effects

<u>Coverage</u>	<u>Written Premium</u>
Collision	\$50,195
Comprehensive	\$30,066
Liability	\$265,526
No Fault	\$5,127
UM/UIM	\$22,938

Earned Exposures by Coverage/Accident Year

Acc Year	<u>Coverage</u>	Earned Exposure - Car Years	
2018	Liability	132.1	
2018	Physical Damage	167.6	
2018	PIP	94.3	
2017	Liability	166.1	
2017	Physical Damage	216.1	
2017	PIP	127.0	
2016	Liability	151.2	
2016	Physical Damage	195.9	
2016	PIP	119.8	
2015	Liability	111.0	
2015	Physical Damage	146.1	
2015	PIP	91.4	
2014	Liability	87.9	
2014	Physical Damage	110.8	
2014	PIP	72.6	